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JOB SERVICE WISCONSIN

Wisconsin Economic Planning Information

ECONOMIC PLANNING INFORMATION

FOR THE

STATE OF WISCONSIN

1983

prepared by the DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS,
JOB SERVICE (LABOR MARKET INFORMATION SECTION)
in cooperation with the
EMPLOYMENT AND TRAINING ADMINISTRATION
OF THE
U.S. DEPARTMENT OF LABOR

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HIGHLIGHTS

Recovery from the recent economic recession is apparently proceeding, although there is much speculation as to its speed and direction. Wisconsin's involvement in heavy manufacturing industries gives rise to concern as to their rate of recovery; a discussion is presented as to the state's industrial outlook in a succeeding chapter. Many middle-income skilled and semi-skilled workers are affected in this recession, moreso than in past downturns, giving additional cause for concern.

The rapid growth in the labor force which occurred in the 1970's has tapered off during the current recession as many workers have become discouraged at the lack of job prospects and have withdrawn from active pursuit of employment. With the recovery many of these workers will redouble their efforts, and their reentry into the labor market may keep the unemployment rate high for a time.

Population growth and geographical movements of workers have been gradual in the past; however, changes in workplace may accelerate as workers move more rapidly in search of jobs.

As would be expected in a recessionary climate, racial and ethnic minority groups have suffered with higher than normal unemployment rates. As recovery proceeds it is hoped that this situation will ease.

One facet of the recession which is coming to light is a reversal in the respective unemployment rates of adult men and adult women. The rate for adult males has been higher than that for females; however with recovery this situation may change again.

CLOSE UP/WISCONSIN*

Wisconsin no longer has more cows than people, but the state still leads the nation in milk, butter, and cheese production. About one-sixth of the milk, one-quarter of the butter, and over one-third of the cheese produced in the United States come from America's Dairyland.

The state ranks highly in many vegetables and fruits, too, and is first in mink production. Agriculture produced over $4.7 billion in cash farm marketing receipts in 1980. Dairy, meat, fruit, and vegetable products shipped from state plants were worth $11.9 billion.

Agriculture is but one component of the Wisconsin economy, however. Total industrial shipments were well over $50 billion in 1980. The 1980 census placed Wisconsin 16th in total population, but 12th in size of labor force engaged in manufacturing. Between 1969 and 1980, Wisconsin was 13th nationally in growth of manufacturing employment, with a net gain of 39,300 jobs. Wisconsin is the only East North Central state to rank above 40th in manufacturing employment growth.

What distinguishes Wisconsin manufacturing is its balance and diversity. In addition to agricultural products, nonelectrical machinery, motor vehicles, paper products, and wood products are mainstays of the state's economy. Cars and trucks shipped from state plants exceed the value of dairy products shipped. In nonelectrical machinery, Wisconsin leads the nation in the production of small gasoline engines, power cranes, mining machinery, and many other types of industrial equipment. This production is concentrated in the Milwaukee area.

Wisconsin's forest-products sector produces more fine paper, sanitary paper products, juvenile furniture, and millwork than any other state. Wisconsin accounts for over 11 percent of all paper made in the United States, and has retained its market share for many years. At the local level, the forest-products sector is the largest manufacturing employer in 26 Wisconsin counties, and of considerable importance in 17 others.

Recreation also is a major industry. Wisconsin is endowed with a broad and beautiful landscape, with many lakes, streams, and forests. With the growing popularity of skiing and snowmobiling, outdoor recreation has become a year-round activity. About ten million people visit the state annually, making Wisconsin ninth in the nation as a travel destination. Though impact is hard to measure precisely, travellers accounted for about $2.8 billion in retail and service sales in 1980.

Wisconsin's economic diversity has traditionally shielded the state from high unemployment. Until the most recent recession, Wisconsin had never had an unemployment rate higher than the nation's. Although the latest data show the state rate to be higher than the national average, it is still much lower than rates in the rest of the industrial Midwest.

How Wisconsin Is Growing

Natural increase, an excess of births over deaths, accounts for virtually all of Wisconsin's population growth. In-migration accounts for only about 3 percent. State-level changes, however, mask the rich variety of growth patterns within the state. Intrastate dynamics can be summed up in two words — turnaround and suburbanization.

The switch from population decline to growth in rural central and northern Wisconsin was not well documented until the 1970s. However, the trend occurred in the late 1960s, and even in the 1950s in a few counties. Several counties had growth rates of 30 to 50 percent during the 1970s. These counties — Adams, Burnett, Sawyer, and Vilas — are blessed with many attractive lakes, and their growth is largely due to migration.

A look at the past 30 years of migration patterns by age group shows an evolution toward rapid growth rather than a revolution. When the state's recreational counties (those with more than 20 percent of their housing stock classified as recreational in 1970) are combined to examine migration patterns, it becomes clear that the rural renaissance involves three key age groups. First, people of retirement age, 65 and over, and also those nearing that age, are moving to recreational counties, on balance. Second, more of those in their young-adult years, 30 to 40, are moving in than out, and they bring with them the third group, their children. From 1950 to 1980, increasing numbers of these groups have moved to the recreational counties. The third is the increasing retention of the 15- to 24-year-olds who have traditionally left these rural areas for schooling and jobs.

From a recent survey of migrants to rapidly growing counties of Wisconsin, much is known about who is moving in and why. People of all age groups mention the favorable environment. Many older migrants say they had vacationed in the area, or had owned a second home and converted it to a year-round dwelling. Others knew the area through family or friends.

The long-term trend of total net migration for metropolitan and nonmetropolitan counties shows a definite turnaround in migration patterns from the 1950s to the 1970s. Nonmetropolitan counties changed from a net outmigration of over 160,000 in the 1950s to a net in-migration of over 100,000 in the 1970s. Metropolitan counties followed the opposite course, from a 107,000 net in-migration during the 1950s to a 95,000 net out-migration during the 1970s. The 1960s were a decade of transition.

Despite the population turnaround, individual counties with the greatest absolute growth are still met-

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ropolitan. In particular, these counties are either the suburban counties of metropolitan areas or single-county SMSAs.

Suburbanization

Suburbanization around large cities during the 1970s was the continuation of a long-standing trend in Wisconsin and the rest of the country. In the Milwaukee SMSA, the three suburban counties to the north and west of the Milwaukee core county all showed rapid growth. While their growth rates were not as high as those in the rural north and west of the state, they all grew by over 20 percent during the decade.

It is important to note that absolute population change is concentrated in these three counties—Ozaukee, Washington and Waukesha. Nearly 30 percent of the state's population increase of 288,000 over the decade occurred in these three counties alone.

In contrast, Milwaukee County, with over one-fifth of the state's people, lost nearly 90,000 during the decade. This loss is greater than the populations of 60 of the other 71 counties. Also, this loss more than offsets growth in the suburban counties of the SMSA, so the Milwaukee SMSA as a whole lost population.

If Milwaukee County were excluded from consideration, Wisconsin's 1970 to 1980 growth rate would be about 11 percent in both its metropolitan and nonmetropolitan areas. Since the effects of suburbanization are not always discernable at the county level, it is useful to look within counties at the growth of city, suburban, and rural populations.

Continued effects of suburbanization are evident in patterns of growth by place size in the metropolitan counties of the state. The population outside incorporated places of any size grew by over 20 percent during the 1970s. A further indicator of population dispersal is that in villages of under 2,500, the population grew by over 25 percent. For places above 2,500 population, the larger the place, the slower the population growth during the decade.

In Wisconsin, net migration differentiates rural areas from urban, and larger cities from smaller. Although some of Wisconsin's larger cities declined and others grew in population during the decade, virtually all of them had substantially more people moving out than moving in. Among cities with over 50,000 inhabitants, about 200,000 more people moved out than moved in during the decade. In rural areas of metropolitan counties, 50,000 more moved in than moved out, accounting for the majority of the growth which occurred in those areas. Medium-sized places of population 2,500 to 10,000 grew from both natural increase and net migration. The trends were similar for nonmetropolitan counties.

Wisconsin is not alone in having rapid rural growth: such growth has become the rule rather than the exception. Dispersal of population growth over wider areas and to smaller cities and villages is occurring across the upper Great Lakes, though to different degrees. This dispersal has many implications for product and service delivery by both business and government.

Household and Family Organization

Household and family composition is changing rapidly in Wisconsin, as in the nation. The number of households in Wisconsin increased nearly 25 percent over the past decade, from 1.3 million in 1970 to 1.7 million in 1980—much faster than the 6.5 percent growth in population.

Even areas that declined in population saw increases in the number of households. For example, in Milwaukee County the number of households was 7 percent greater in 1980 than in 1970 despite an 8 percent loss in total population. Continuing declines in household size are behind these trends: Household size in the state dropped from 3.2 to 2.8 persons per household between 1970 and 1980.

The bulk of the baby-boom generation reached household formation age during the decade, and they are forming households differently from

those who preceded them. They are leaving their parental households earlier, and they are delaying marriage and living alone or with nonrelatives. Those who do marry are delaying childbirth and having fewer children. At the other end of the age spectrum, older persons are living longer and are less likely to live with relatives. Among the middle aged, the continued rise in divorce rates creates more households.

Wisconsin households created contradictory trends during the 1970s. The number of families grew at a rate twice that of the total state population. While the number of families in Milwaukee County decreased, in the rest of the state it increased 18 percent. Nonetheless, the percentage of the population living in families dropped from 90 to 85 percent.

The family types that grew most rapidly were those without a married couple. The major component of this growth was in female-headed families; 1 in 12 Wisconsin households contained a family with a female householder by 1980, an increase of 54 percent. Married-couple households, on the other hand, increased by only 8 percent. The number of married-couple households decreased by 15 percent in Milwaukee County, but grew 15 percent elsewhere.

Nonfamily households increased dramatically in Wisconsin — from 250,000 in 1970 to 450,000 in 1980. Twelve percent of state residents lived in nonfamily households in 1980 versus 7 percent in 1970. About one of four households in the state is a nonfamily household. In Milwaukee this ratio is closer to one in three.

Indeed, Milwaukee, which stands apart from the rest of the state in its household trends, is an extreme case of the nation's changing household structure. Fewer families and fewer married-couple families live in Milwaukee County today than a decade ago. Nonfamily households have increased rapidly in the city, among both the young and the old. Unlike the three suburban counties of the

Wisconsin's Counties–Population Growth and Decline in the 1970s

Source: 1980 Census

	Population 1980	Population 1970	Difference 1970–1980	Natural Increase 1970–1980	Net Migration 1970–1980	Percent Change 1970–1980
State Total	4,705,335	4,417,821	287,514	277,600	9,914	6.51
Adams	13,457	9,234	4,223	12	4,212	45.73
Ashland	16,783	16,743	40	151	−111	0.24
Barron	38,730	33,955	4,775	1,338	3,437	14.06
Bayfield	13,822	11,683	2,139	44	2,095	18.31
Brown	175,280	158,244	17,036	15,241	1,795	10.77
Buffalo	14,309	13,743	566	618	−52	4.12
Burnett	12,340	9,276	3,064	44	3,021	33.03
Calumet	30,867	27,604	3,263	2,693	570	11.82
Chippewa	51,702	47,717	3,985	3,646	339	8.35
Clark	32,910	30,361	2,549	1,714	835	8.40
Columbia	43,222	40,150	3,072	1,451	1,621	7.65
Crawford	16,556	15,252	1,304	785	519	8.55
Dane	323,545	290,272	33,273	24,069	9,204	11.46
Dodge	74,747	69,004	5,743	3,875	1,869	8.32
Door	25,029	20,106	4,923	684	4,239	24.49
Douglas	44,421	44,657	−236	1,493	−1,729	−0.53
Dunn	34,314	28,991	5,323	1,724	3,599	18.36
Eau Claire	78,805	67,219	11,586	4,321	7,266	17.24
Florence	4,172	3,298	874	24	851	26.50
Fond du Lac	88,952	84,567	4,385	5,520	−1,135	5.19
Forest	9,044	7,691	1,353	278	1,075	17.59
Grant	51,736	48,398	3,338	3,261	77	6.90
Green	30,012	26,714	3,298	1,365	1,933	12.35
Green Lake	18,370	16,878	1,492	413	1,079	8.84
Iowa	19,802	19,306	496	831	−335	2.57
Iron	6,730	6,533	197	−165	362	3.02
Jackson	16,831	15,325	1,506	667	840	9.83
Jefferson	66,152	60,060	6,092	3,735	2,357	10.14
Juneau	21,039	18,455	2,584	756	1,828	14.00
Kenosha	123,137	117,917	5,220	7,727	−2,507	4.43
Kewaunee	19,539	18,961	578	1,122	−544	3.05
La Crosse	91,056	80,468	10,588	4,438	6,150	13.16
Lafayette	17,412	17,456	−44	1,049	−1,093	−0.25
Langlade	19,978	19,220	758	672	86	3.94
Lincoln	26,311	23,499	2,812	949	1,863	11.97
Manitowoc	82,918	82,294	624	4,372	−3,748	0.76
Marathon	111,270	97,457	13,813	8,633	5,181	14.17
Marinette	39,314	35,810	3,504	619	2,885	9.79
Marquette	11,672	8,869	2,803	96	2,711	31.66
Menominee	3,371	2,607	766	483	283	29.38
Milwaukee	964,988	1,054,249	−89,261	60,097	−149,358	−8.47
Monroe	35,074	31,610	3,464	1,637	1,827	10.96
Oconto	28,947	25,553	3,394	951	2,443	13.28
Oneida	31,216	24,427	6,789	832	5,957	27.79
Outagamie	128,726	119,398	9,328	11,330	−2,002	7.81
Ozaukee	66,981	54,461	12,520	4,793	7,727	22.99
Pepin	7,477	7,319	158	373	−215	2.16
Pierce	31,149	26,652	4,497	2,257	2,240	16.87
Polk	32,351	26,666	5,685	1,309	4,376	21.32
Portage	57,420	47,541	9,879	4,265	5,614	20.78
Price	15,788	14,520	1,268	265	1,003	8.73
Racine	173,132	170,838	2,294	12,804	−10,510	1.34
Richland	17,476	17,079	397	651	−254	2.32
Rock	139,420	131,970	7,450	9,408	−1,958	5.65
Rusk	15,589	14,238	1,351	665	686	9.49
St. Croix	43,872	34,354	9,518	3,422	6,096	27.71
Sauk	43,469	39,057	4,412	2,129	2,283	11.30
Sawyer	12,843	9,670	3,173	103	3,070	32.81
Shawano	35,928	32,650	3,278	1,028	2,251	10.04
Sheboygan	100,935	96,660	4,275	5,219	−944	4.42
Taylor	18,817	16,958	1,859	1,297	562	10.96
Trempealeau	26,158	23,344	2,814	767	2,047	12.05
Vernon	25,642	24,557	1,085	354	731	4.42
Vilas	16,535	10,958	5,577	32	5,609	50.89
Walworth	71,507	63,444	8,063	2,408	5,655	12.71
Washburn	13,174	10,601	2,573	260	2,314	24.27
Washington	84,848	63,839	21,009	7,157	13,852	32.91
Waukesha	280,326	231,335	48,991	18,002	30,989	21.18
Waupaca	42,831	37,780	5,051	828	4,223	13.37
Waushara	18,526	14,795	3,731	223	3,508	25.22
Winnebago	131,732	129,946	1,786	6,797	−5,011	1.37
Wood	72,799	65,362	7,437	5,270	2,167	11.38

SMSA, the central city is not attracting migrants with young families.

In the rest of the state, the number of families is growing, reflecting the baby boom's entry into the family formation years. Nonetheless, throughout the state many more people now live outside families than in 1970.

Race and Ethnicity

Nearly 95 percent of Wisconsin residents are white. Blacks are 4 percent, and American Indians less than 1 percent of the total population.

Four of five of Wisconsin's 183,000 blacks live in the city of Milwaukee. Another 13 percent live in the cities of Racine, Kenosha, Beloit, and Madison. Only 7 percent live in the balance of the state, and half of them live in the counties that contain these five cities.

The black population of Wisconsin grew 42 percent from 1970 to 1980, both from high natural increase (25 percent) and net in-migration (17 percent). This contrasts sharply with the total population, which had only a 6 percent rate of natural increase.

American Indians, of whom there are nearly 30,000 in the state, are surprisingly urbanized. Over 20 percent live in Milwaukee and Green Bay alone. Within Wisconsin borders there are 11 tribes which have reservation and trust lands. Rural and reservation Indians live mainly in northern Wisconsin, where they are the largest minority group.

Wisconsin also has 63,000 Hispanics, according to the 1980 census. Three of five Hispanics live in the large cities of southern Wisconsin.

Age Composition Changes

Perhaps the most significant implications for government, marketing, and services are created by continuing changes in Wisconsin's age composition. These changes follow migration patterns. Increases in the number of elderly and in families with children have occurred in the fast-growing nonmetropolitan counties. In the suburbs of the major cities, young families are still the main reason for growth.

The flow of young people out of the majority of Wisconsin counties for schooling and jobs continues. University of Wisconsin campuses attract students from across the nation. For the state as a whole, however, close to zero net migration of people at any age group leaves birthrates and the baby boom as the major determinants of the state's age composition.

The number of annual births in Wisconsin has been slowly rising from its low point of 64,000 in 1973. Thus, the number of children under age five will increase from 346,000 in the 1980 census to about 415,000 in 1990.

The school-age population, 5 to 17, will decline to 925,000 by 1985, and then turn slowly upward. Elementary schools will be first to feel the enrollment turnaround after 1985. Having just produced their largest class in 1978, high schools will see their enrollments continue to decline until 1990. Likewise, 18- to 20-year-olds will decline from 288,000 in 1980 to just over 200,000 in 1990.

The 21-to-44 age group had enormous growth, from 1.2 million in 1970 to 1.6 million in 1980, an increase of more than 30 percent. While only 288,000 persons were added to the state's total population, 370,000 were added to this age group. Older Wisconsin residents, those aged 45 to 64, increased in number by less than 1 percent in the 1970s. This group will grow moderately from 889,000 in 1980 to 920,000 in 1990.

The population 65 and over has had continuous growth from 1960 to the present. From 471,000 in 1970 they increased to 564,000 in 1980, and the 1990 projection is 650,000. Increases in life expectancy among the elderly are a strong component in this growth.

Wisconsin's Future

Wisconsin probably will not join the rest of the East North Central Division in experiencing substantial out-migration during the years ahead. The solid foundation of a large, balanced manufacturing sector built on a skilled work force provides stability. Aging in some segments of the state's industrial sector, as well as market challenges from the Sunbelt and abroad, may threaten this stability. While these factors probably contributed to the decline in industry seen in the rest of the industrial Midwest in the 1970s, Wisconsin manufacturing grew during that period.

With a skilled work force, strong post-secondary programs at both universities and vocational and technical institutions, a concerned state government, and an abundance of natural resources, Wisconsin is in a strong competitive position. The extractive industries, farming and wood products, are tied to the land. Recreation will also continue to expose potential migrants to the state's beautiful, four-season environmental amenities.

Within the state, most counties will continue to grow due to further dispersal of the population. The 30-year history of migration patterns in metropolitan and nonmetropolitan counties shows the momentum of the "new" trend of rural renaissance. For this trend to change, probably another decade of transition like the 1960s would have to occur. Wisconsin will by no means become a predominantly nonmetropolitan state, but the balance will shift in that direction.

Important changes in the age profile of Wisconsin will continue, as they will in the nation, due to the baby boom and baby bust. But the biggest question is how the state will weather the 1982 recession. The recessions of the 1970s did not seriously affect Wisconsin, but the most recent recession has caused Wisconsin's unemployment rate to exceed the nation's average for the first time since records have been kept. Yet, unemployment rates are still lower in Wisconsin than in neighboring industrial states. Estimates produced since 1980 indicate a population growth of about 25,000 people per year. The long-term effects of the recession on Wisconsin demographics, however, will not be known for some time. •

WISCONSIN JOB
SERVICE DISTRICTS
SUPERIOR
DOUGLAS
BAYFIELD
ASHLAND
ASHLAND
IRON
Hurley
VILAS
WASHBURN
SAWYER
Hayward
BURNETT
Siren
Spooner
PRICE
Park Falls
Phillips
ONEIDA
Minocqua
RHINELANDER
FOREST
FLORENCE
MARINETTE
POLK
BARRON
Rice Lake
RUSK
Ladysmith
LINCOLN
Tomahawk
LANGLADE
Antigo
OCONTO
Balsam Lake
CHIPPEWA
TAYLOR
Medford
Merrill
ST.CROIX
DUNN
Hudson
Menomonie
MARATHON
WAUSAU
MENOMINEE
Keshena
Marinette
DOOR
PIERCE
CLARK
SHAWANO
Shawano
Oconto
EAU CLAIRE
EAU CLAIRE
PERIN
Neillsville
WOOD
Marshfield
PORTAGE
Stevens Point
WAUPACA
BROWN
KEWAUNEE
GREEN BAY
BUFFALO
TREMPEALEAU
JACKSON
Black River Falls
WISCONSIN RAPIDS
OUTAGAMIE
New London
Galesville
JUNEAU
ADAMS
WAUSHARA
Wautoma
WINNEBAGO
MENASHA
CALUMET
Chilton
MANITOWOC
MANITOWOC
MONROE
Tomah
LA CROSSE
LA CROSSE
Adams
OSHKOSH
MARQUETTE
GREEN LAKE
Berlin
FOND DU LAC
SHEBOYGAN
SHEBOYGAN
Hauston
VERNON
SAUK
COLUMBIA
DODGE
Beaver Dam
WASHINGTON
OZAUKEE
Baraboo
RICHLAND
Richland Center
West Bend
Grafton
CRAWFORD
WATERTOWN
DANE
Prairie du Chien
GRANT
IOWA
MADISON
JEFFERSON
WAUKESHA
MIL.
Milwaukee No.
MILWAUKEE
Milwaukee So.
LANCASTER
Mineral Point
WAUKESHA
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
Monroe
JANESVILLE
Elkhorn
RACINE
KENOSHA
Beloit
KENOSHA
District Offices
Full Time Branches
Part Time Offices
Part Time U.C. Only
6/83

1. Milwaukee County
2. Southeastern Wisconsin
3. East Central Wisconsin
4. Madison/Dane
5. South Central Wisconsin
6. Rock County
7. Lake Michigan
8. West Lake Winnebago
9. North Lake Winnebago
10. Central Wisconsin
11. West Central Wisconsin
12. Northwest Wisconsin
13. North Central Wisconsin
14. Northeastern Wisconsin
15. Southwestern Wisconsin
16. Western Wisconsin
17. Marathon County

6/83

WISCONSIN STANDARD METROPOLITAN STATISTICAL AREAS (SMSA's)

SMSA	Counties Included	Population 1970	Population 1981
Appleton-Oshkosh	Calumet	27,604	31,386
	Outagamie	119,398	129,603
	Winnebago	129,946	131,769
		276,948	292,758
Eau Claire	Chippewa	47,717	52,137
	Eau Claire	67,219	79,685
		114,936	131,822
Green Bay	Brown	158,244	177,142
Janesville-Beloit	Rock	131,970	139,157
Kenosha	Kenosha	117,917	123,574
La Crosse	La Crosse	80,468	92,173
Madison	Dane	290,272	325,785
Wausau	Marathon	97,457	111,329
Milwaukee	Milwaukee	1,054,249	964,675
	Ozaukee	54,461	67,026
	Washington	68,839	85,291
	Waukesha	231,335	282,521
		1,408,884	1,399,513
Racine	Racine	170,838	173,422
Sheboygan	Sheboygan	96,660	101,104
SMSA TOTAL		2,944,594	3,067,779
SMSA portion of total population		66.7%	64.8%

Wisconsin shares the Duluth-Superior SMSA with the state of Minnesota. The SMSA is composed of Douglas County, Wisconsin and St. Louis County, Minnesota. Douglas County for Wisconsin purposes is classified as a Labor Market Area.

The eleven Standard Metropolitan Statistical Areas in the state gained population as a whole. The Milwaukee area is the only one with a population loss. In the Milwaukee area, significant gains in Ozaukee, Washington and Waukesha counties did not offset the 89,574 population loss of Milwaukee County.

The SMSA's, though gaining in absolute population, lost in percentage of total population.

NOTE: These areas are subject to minor change as of June 30, 1983. For latest information please contact your local labor market information specialist.

POPULATION CHARACTERISTICS BY AGE, SEX, AND RACIAL STATUS
1970 - 1983

State of Wisconsin

Age	Total		1970				1983			
			White		Nonwhite		White		Nonwhite	
	1970	1983	Male	Female	Male	Female	Male	Female	Male	Female
Total	4417731	4786000	2090226	2168733	77147	81625	2200436	2297621	140196	147747
0-4	382227	352468	184923	176395	10496	10110	160529	155177	18741	18021
5-9	461184	349686	225046	216801	10496	10795	159932	156455	16936	16363
10-14	474178	364534	23143	221284	10466	10454	169530	168796	13270	12936
15-19	433153	395869	211761	205982	8873	8560	185523	186643	11571	11831
20-24	337098	425580	147933	170632	6278	7507	203186	191281	15086	16027
25-29	272746	438346	12 755	130129	5021	5749	218734	183249	17905	18458
30-34	233701	389084	110924	113737	4277	5577	195178	166196	13498	14213
35-39	226021	320187	108115	109936	4198	4856	153231	149977	7834	9144
40-44	244225	255476	117489	118604	3986	4239	119769	123230	5693	6784
45-49	243723	224432	115622	120056	3202	3225	101811	111986	4631	6004
50-54	232208	220867	110431	117296	2364	2417	100714	111199	4060	4893
55-59	215918	223837	102801	110243	1986	2096	101540	115140	3325	3833
60-64	188484	208013	89736	95804	1547	1618	91993	110681	2481	2857
65-69	155911	182157	71515	82515	1181	1172	77940	100282	1764	2170
70-74	128259	187069	56068	70643	754	862	73791	109731	1556	1990
75+	188795	248395	76175	110062	799	1014	86734	157597	1844	2221

Source: 1970 Census - Tables 19 & 20, General Population Characteristics Wisconsin PC (1)-B51, U.S. Dept. of Commerce, Bureau of the Census. 1983 Population Characteristics - Lawrence Berkeley Laboratory

POPULATION AND DEMOGRAPHIC CHANGES FOR
STATE OF WISCONSIN BY RACE AND SEX
1970 - 1983

Population Characteristics	1970 Census	1983 LBL Projections	Absolute Change 1970-1983	Percent Change 1970-1983
Male, Total	2,167,373	2,340,632	173,259	8.0
White	2,090,226	2,200,435	110,209	5.3
Black	62,116	93,655	31,539	50.8
Other	15,031	46,540	31,509	209.6
Female, Total	2,250,358	2,445,368	195,010	8.7
White	2,168,733	2,297,622	128,889	5.9
Black	66,108	99,590	33,482	50.6
Other	15,517	48,158	32,641	210.4

Note: Comparisons of the "Other" category may be misleading due to different methods of counting in the 1970 and 1980 Census.

POPULATION AND DEMOGRAPHIC CHANGES FOR
THE STATE OF WISCONSIN BY AGE, RACE, SEX
1970 - 1980

Population Characteristics	Census[1] Population		Absolute Change 1970 - 1980	Percent Change 1970 - 1980
	1970	1980		
(A)	(B)	(C)	(D)	(E)
Age/Sex, Total	4,417,731	4,705,767	288,036	6.5
Male, Total	2,167,373	2,305,427	138,054	6.4
16-17	88,970	94,477	5,507	6.2
18-19	82,158	95,828	13,670	16.6
20-21	64,444	92,578	28,134	43.7
22-24	93,702	131,672	37,970	40.5
25-44	483,825	625,921	142,096	29.4
45-54	232,289	223,162	-9,127	-3.9
55-64	195,315	207,108	11,793	6.0
65/Over	206,703	233,662	26,959	13.0
Female, Total	2,250,358	2,400,340	149,982	6.7
16-17	85,479	90,513	5,034	5.9
18-19	84,941	96,955	12,014	14.1
20-21	78,035	94,626	16,591	21.3
22-24	100,917	131,150	30,233	30.0
25-44	492,868	626,082	133,214	27.0
45-54	243,642	229,783	-13,859	-5.7
55-64	209,087	228,885	19,798	9.5
65/Over	266,162	330,535	64,373	24.2

[1]1970 and 1980 Census, U.S. Department of Commerce, Bureau of the Census

POPULATION AND DEMOGRAPHIC CHANGES FOR
STATE OF WISCONSIN BY AGE, RACE, SEX
1980 - 1983

Population Characteristics	Population		Absolute Change 1980 - 1983	Percent Change 1980 - 1983
	1980[1]	1983		
(A)	(B)	(C)	(D)	(E)
Age/Sex, Total	4,705,767	4,786,000[2]	80,233	1.7
Male, Total	2,305,427	2,340,632[3]		
16-19	190,305	157,915	-32,390	-17.0
20-21	92,578	87,309	-5,269	- 5.7
22-44	757,593	862,805	105,212	13.9
45-54	223,162	221,217	-1,945	- 0.9
55/Over	440,770	442,968	2,198	+ 0.5
Female, Total	2,400,340	2,445,368	45,028	1.9
16-19	187,468	158,780	-28,688	-15.3
20-21	94,626	82,923	-11,703	-12.4
22-44	757,232	795,636	38,404	5.1
45-54	229,783	234,082	4,299	1.9
55/Over	559,420	606,503	47,083	8.4

[1] 1980 Census, U.S. Department of Commerce, Bureau of the Census
[2] State of Wisconsin, Dept. of Administration
[3] Labor Market Projections Model, Lawrence Berkeley Laboratory

CURRENT POPULATION SURVEY, REGION 9

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

CURRENT POPULATION SURVEY, REGION 9 STATE OF WISCONSIN

POPULATION 16 YEARS OLD AND OVER IN THE LABOR FORCE BY AGE AND SEX
COUNT OF PERSONS 16 YEARS OLD AND OVER IN THE LABOR FORCE

	4TH COUNT 1970 CENSUS			
	TOTAL	WHITE	BLACK	OTHER
MALE				
16-17 YEARS OLD	38,112	37,210	733	169
18-19 YEARS OLD	50,474	48,764	1,504	206
20-21 YEARS OLD	45,027	43,349	1,370	308
22-24 YEARS OLD	78,345	75,446	2,419	480
25-34 YEARS OLD	238,316	230,094	6,584	1,638
35-44 YEARS OLD	225,401	218,052	6,168	1,181
45-64 YEARS OLD	384,067	376,758	5,937	1,372
65 YEARS AND OVER	52,137	51,510	492	135
FEMALE				
16-17 YEARS OLD	25,984	25,298	555	141
18-19 YEARS OLD	46,211	45,050	992	169
20-21 YEARS OLD	47,399	45,663	1,490	246
22-24 YEARS OLD	58,788	56,359	1,977	452
25-34 YEARS OLD	112,709	106,088	5,662	959
35-44 YEARS OLD	120,595	115,279	4,634	682
45-64 YEARS OLD	225,563	220,578	4,169	816
65 YEARS AND OVER	28,281	27,871	334	76

TABULATION 17, PAGE 1

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

AGE AND SEX /1
COUNT OF PERSONS

	4TH COUNT 1970 CENSUS			
	TOTAL	WHITE	BLACK	OTHER
FEMALE				
UNDER 3	107,719	101,795	4,968	956
3-4	78,786	74,600	3,624	562
5	42,899	40,821	1,781	297
6	44,530	42,430	1,725	375
7-9	140,167	133,550	5,497	1,120
10-13	185,641	177,287	6,991	1,363
14	46,097	43,997	1,722	378
15	45,507	43,609	1,671	27
16	43,118	41,275	1,527	16
17	42,615	40,990	1,338	287
18	43,652	42,037	1,340	275
19	39,650	38,071	1,312	267
20	39,973	38,236	1,401	336
21	37,558	35,903	1,393	262
22-24	100,608	96,493	3,325	790
25-29	135,878	130,129	4,703	1,046
30-34	119,314	113,737	4,482	1,095
35-39	114,792	109,936	3,883	973
40-44	122,843	118,604	3,591	648
45-49	123,291	120,056	2,633	592
50-54	119,713	117,296	1,966	451
55-59	112,339	110,243	1,646	450
60-61	41,218	40,433	595	190
62-64	56,204	55,371	608	225
65-69	83,687	82,515	939	233
70-74	71,505	70,643	698	164
75 AND OVER	111,076	110,062	648	368

/1 ALL TABULATIONS NOT OTHERWISE INDICATED REPRESENT 20 PERCENT SAMPLE.

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

AGE AND SEX /1
COUNT OF PERSONS

4TH COUNT 1970 CENSUS

	TOTAL	WHITE	BLACK	OTHER
MALE				
UNDER 3	112,515	106,277	5,238	1,000
3-4	82,904	78,644	3,525	733
5	44,472	42,377	1,750	345
6	46,164	44,124	1,719	321
7-9	144,906	138,565	5,310	1,051
10-13	194,585	186,040	7,126	1,423
14	49,020	47,103	1,581	336
15	48,430	46,457	1,627	346
16	46,179	44,131	1,690	358
17	44,030	42,394	1,302	324
18	44,136	42,269	1,589	278
19	37,849	36,510	1,122	237
20	32,679	31,179	1,231	269
21	30,254	29,142	855	257
22-24	91,278	87,612	2,933	733
25-29	134,776	129,755	3,944	1,077
30-34	115,201	110,924	3,376	901
35-39	112,313	108,115	3,416	782
40-44	121,475	117,489	3,405	581
45-49	118,824	115,622	2,641	561
50-54	112,795	110,431	1,867	497
55-59	104,787	102,801	1,567	419
60-61	38,169	37,485	578	106
62-64	53,114	52,251	645	218
65-69	72,696	71,515	901	280
70-74	56,822	56,068	598	156
75 AND OVER	76,974	76,175	585	214

/1 ALL TABULATIONS NOT OTHERWISE INDICATED REPRESENT 20 PERCENT SAMPLE.

Cover Page

STATE OF WISCONSIN

The Projections are organized as follows
1) Population Projections (9-12 Pages, optional)
2) Labor Force Projections (3 Pages, optional)
3) Unemployment Projections (1-2 Pages, optional)
4) Summary Totals and JTPA Age Distributions (1-8 Pages)
Variations in the above pattern are caused by the suppression of the intermediate tables, and by the submission of multiple Labor Force and Unemployment control totals by the State Analysts

This region is comprised of the following areas from the 1970 Fourth Count Census

1 WISCONSIN (+1)

From the 1970 Fourth Count Census,
The population at school and in the military in 1970, is as follows

	Pop in School, by age				In the Military	
	16-17	18-19	20-24	25-34	Males	Females
White	159149	99062	79036	25957	3178	97
Black	5149	2143	1603	1139	111	9
Other	1005	617	956	587	6	0
Total	165303	101822	81595	27683	3295	106

The age breakdown for the military is derived from data in the 6th Count Census

The population in the Military is estimated to be

	16-17	18-19	20-24	25-34	35-44	45-64	65+
White Male	5	180	1397	819	535	230	12
Black Male	0	6	26	41	24	14	0
Other Male	0	0	1	3	1	1	0
White Female	0	18	20	15	18	18	0
Black Female	0	0	0	9	0	0	0
Other Female	0	0	0	0	0	0	0

Adjustments for College are made only to those age race cohorts with 5.0 percent of more students

This area is estimated to have the following college population in 1970

	15-19		20-24		25-29		30-34	
	Male	Female	Male	Female	Male	Female	Male	Female
White	50773	48289	38750	40286	9760	4257	4465	2284
Black	1071	1072	733	870	383	219	208	109
Other	334	283	479	477	188	183	117	61

POPULATION COMPOSITION PROJECTIONS

Age Cohort	White Males	White Females	Black Males	Black Females	Other Males	Other Females	Total Whites	Total Blacks	Total Others	Total Males	Total Females	Total
0- 4	169968	162077	10709	10446	5971	5636	332045	21155	11607	186649	178158	364807
5- 9	167354	159543	10644	10386	5900	5628	326896	21030	11528	183898	175556	359454
10-14	168048	165392	11448	11262	5334	5387	333440	22709	10720	184829	182040	366870
15-19	187931	199218	9729	9534	4214	3962	387149	19263	8176	201874	212714	414588
20-24	207493	187464	9987	9294	4787	4444	394957	19281	9232	222268	201202	423470
25-29	212218	196465	10944	11498	4928	5175	408683	22442	10102	228090	213137	441227
30-34	187984	179762	8590	10009	4047	4627	367746	18600	8674	200622	194398	395020
35-39	161332	156457	5594	6724	3137	3358	317789	12317	6495	170062	166539	336601
40-44	126313	124882	3563	4676	2411	2487	251195	8239	4898	132286	132046	264332
45-49	105494	111574	3018	4292	1726	2106	217068	7310	3832	110237	117972	228210
50-54	102581	107273	2988	3639	1319	1543	209851	6628	2862	106888	112452	219341
55-59	103614	112573	2736	3174	891	958	216183	5909	1849	107237	116705	223942
60-64	95987	111142	2148	2340	781	809	207130	4488	1589	98916	114291	213207
65-69	80468	100118	1637	1781	489	703	180586	3417	1192	82594	102601	185196
70-74	73102	103701	969	1473	491	777	176803	2442	1268	74563	105950	180513
75 +	91627	161024	1282	1775	605	933	252651	3058	1538	93514	163732	257246
14-15	71196	72922	4235	4159	1909	1870	144118	8395	3779	77341	78951	156292
16-19	150345	159374	7783	7628	3371	3170	309719	15411	6541	161499	170171	331670
20-21	82997	74986	3995	3717	1915	1778	157983	7712	3693	88907	80481	169388
Youth 16-21	233342	234360	11778	11345	5286	4947	467702	23123	10233	250406	250652	501058
22-44	812343	778044	34683	38484	17395	18313	1582387	73167	35708	864421	826841	1691262
45-54	208075	218844	6006	7931	3044	3650	426919	13937	6694	217126	234424	447550
55 AND OVER	444795	588558	8772	10543	3258	4179	1033353	19315	7437	456824	603288	1060104
TOTAL	2241511	2338661	95986	102303	47031	48532	4580171	198289	95563	2384528	2489495	4874024

LABOR FORCE COMPOSITION PROJECTIONS - Total labor force =2525500 Labor force participation rate = 68.3

Age Cohort	White Males	White Females	Black Males	Black Females	Other Males	Other Females	Total Whites	Total Blacks	Total Others	Total Males	Total Females	Total
LABOR FORCE FIGURES												
16-17	44136	46735	1448	1553	634	779	90871	3002	1414	46219	49067	95286
18-19	53513	61182	2278	1788	713	619	114695	4066	1332	56504	63589	120093
20-24	176871	148550	8058	5898	3207	2503	325421	13956	5711	188137	156951	345088
25-34	390158	289045	18315	17000	7747	5633	679203	35316	13380	416221	311678	727899
35-44	280459	226676	8407	8990	4883	3128	507134	17397	8011	293749	238793	532542
45-64	344166	254743	8235	9004	3341	2771	598908	17239	6112	355741	266518	622260
65+	47023	33777	621	518	223	170	80801	1140	392	47867	34465	82333
LABOR FORCE PARTICIPATION RATES												
16-17	58.7	58.6	37.2	40.7	37.6	49.2	58.7	39.0	43.2	57.2	57.7	57.5
18-19	71.2	76.8	58.5	46.9	42.3	39.1	74.1	52.8	40.7	70.0	74.7	72.4
20-24	85.2	79.2	80.7	63.5	67.0	56.3	82.4	72.4	61.9	84.6	78.0	81.5
25-34	97.5	76.8	93.8	79.0	86.3	57.5	87.5	86.0	71.3	97.1	76.5	87.0
35-44	97.5	80.6	91.8	78.9	88.0	53.5	89.1	84.6	70.3	97.2	80.0	88.6
45-64	84.4	57.6	75.6	67.0	70.8	51.2	70.4	70.8	60.3	84.0	57.8	70.3
65+	19.2	9.3	16.0	10.3	14.1	7.0	13.2	12.8	9.8	19.1	9.3	13.2
LABOR FORCE FIGURES												
16-19	97649	107916	3726	3341	1347	1398	205565	7067	2746	102723	112656	215378
20-21	70748	59420	3223	2359	1283	1001	130168	5582	2284	75255	62780	138035
Youth 16-21	168397	167336	6950	5700	2630	2400	335734	12650	5030	177978	175436	353414
22-44	776749	604851	31558	29528	14555	10263	1381590	61086	24818	822852	644642	1467494
45-54	172083	127371	4118	4502	1670	1386	299454	8620	3056	177871	133259	311130
55 AND OVER	219106	161149	4739	5021	1893	1555	380255	9759	3448	225738	167724	393463
TOTAL	1336326	1060707	47364	44751	20749	15603	2397034	92115	36352	1404439	1121061	2525500

LABOR FORCE COMPOSITION PROJECTIONS - Total labor force =2525500 Labor force participation rate = 68.3

Age Cohort	White Males	White Females	Black Males	Black Females	Other Males	Other Females	Total Whites	Total Blacks	Total Others	Total Males	Total Females	Total
LABOR FORCE PARTICIPATION RATES												
16-19	64.9	67.7	47.9	43.8	40.0	44.1	66.4	45.9	42.0	63.6	66.2	64.9
20-21	85.2	79.2	80.7	63.5	67.0	56.3	82.4	72.4	61.9	84.6	78.0	81.5
Youth 16-21	72.2	71.4	59.0	50.2	49.8	48.5	71.8	54.7	49.2	71.1	70.0	70.5
22-44	95.6	78.5	91.0	76.7	83.7	56.0	87.3	83.5	69.5	95.2	78.0	86.8
45-54	82.7	58.2	68.6	56.8	54.9	38.0	70.1	61.8	45.7	81.9	57.8	69.5
55 AND OVER	49.3	27.4	54.0	47.6	58.1	37.2	36.8	50.5	46.4	49.4	27.8	37.1
TOTAL	78.7	58.5	77.3	65.5	71.6	50.2	68.3	71.1	64.5	78.5	58.7	68.3

UNEMPLOYMENT PROJECTIONS BY RACE/SEX - Total unemployment rate = 10.5

Age Cohort	White Males	White Females	Black Males	Black Females	Other Males	Other Females	Total Whites	Total Blacks	Total Others	Total Males	Total Females	Total
UNEMPLOYMENT FIGURES												
	124887	104828	13215	11021	7657	3569	229715	24236	11226	145759	119419	265177
UNEMPLOYMENT RATES												
	9.3	9.9	27.9	24.6	36.9	22.9	9.6	26.3	30.9	10.4	10.7	10.5

UNEMPLOYMENT PROJECTIONS BY RACE/SEX/AGE

Age Cohort	White Males	White Females	Nonwhite Males	Nonwhite Females	Total Whites	Total Nonwhites	Total Males	Total Females	Total
UNEMPLOYMENT FIGURES									
16-17	12027	15648	1206	1475	27675	2681	13233	17123	30356
18-19	11138	11839	1386	1554	22977	2939	12524	13392	25916
20-24	29591	18891	4481	3801	48482	8281	34071	22692	56763
25-34	36884	28430	8833	4574	65314	13407	45717	33004	78721
35-44	15904	14550	2606	1494	30454	4100	18510	16044	34554
45-64	17616	14055	2275	1638	31671	3913	19891	15693	35584
65+	1726	1416	86	55	3142	142	1812	1471	3284
UNEMPLOYMENT RATES									
16-17	27.3	33.5	57.9	63.2	30.5	60.7	28.6	34.9	31.9
18-19	20.8	19.4	46.3	64.6	20.0	54.5	22.2	21.1	21.6
20-24	16.7	12.7	39.8	45.2	14.9	42.1	18.1	14.5	16.4
25-34	9.5	9.8	33.9	20.2	9.6	27.5	11.0	10.6	10.8
35-44	5.7	6.4	19.6	12.3	6.0	16.1	6.3	6.7	6.5
45-64	5.1	5.5	19.7	13.9	5.3	16.8	5.6	5.9	5.7
65+	3.7	4.2	10.2	8.1	3.9	9.3	3.8	4.3	4.0
UNEMPLOYMENT FIGURES									
16-19	23165	27487	2591	3029	50652	5620	25757	30515	56272
20-21	11836	7556	1792	1520	19393	3313	13629	9077	22705
Youth 16-21	35002	35043	4384	4549	70045	8932	39385	39592	78977
22-44	70543	54314	14127	8348	124857	22475	84670	62663	147332
45-54	8808	7027	1137	819	15836	1956	9946	7846	17792
55 AND OVER	10534	8443	1224	874	18978	2098	11758	9318	21076
UNEMPLOYMENT RATES									
16-19	23.7	25.5	51.1	63.9	24.6	57.3	25.1	27.1	26.1
20-21	16.7	12.7	39.8	45.2	14.9	42.1	18.1	14.5	16.4
Youth 16-21	20.8	20.9	45.8	56.2	20.9	50.5	22.1	22.6	22.3
22-44	9.1	9.0	30.6	21.0	9.0	26.2	10.3	9.7	10.0
45-54	5.1	5.5	19.7	13.9	5.3	16.8	5.6	5.9	5.7
55 AND OVER	4.8	5.2	18.5	13.3	5.0	15.9	5.2	5.6	5.4

WISCONSIN LABOR FORCE GROWTH

The number of people in the labor force varies due to changes in the number of people who are of working age, 16 years of age or over. The labor force also changes due to changes in the age and sex composition of the population.

The labor force participation rate is another factor determining the size of the labor force. The labor force participation rate is the proportion of the population 16 years of age or over who work or look for work. This rate changes due to complex economic, cultural, and social causes.

Growth Due to Demographic Factors

The age and sex composition of the population is important in determining labor force size because the labor force participation rate is different for different age and sex groups. These specific labor force participation rates are highest for men age 25-44, and lower for younger workers, older workers, and women.

We can study labor force changes due to demographic factors by holding constant these age specific labor force participation rates. We can relatively accurately project future labor force changes due to demographic factors because this future labor force has already been born.

The bulge in the population caused by the higher birth rates of the 1950's is working itself up through the age groups like a bubble. This bubble will be followed by another containing smaller numbers because of the lower birth rate in the mid 1960's. You can see the bulge in the following table.

APPROXIMATE DISTRIBUTION OF TOTAL
LABOR FORCE BY AGE WITH PARTICIPATION
RATES HELD CONSTANT*, WISCONSIN

Age	1970	1975	1980	1985	1990
16-19	10.2	10.1	9.1	7.2	6.1
20-24	13.5	15.6	15.5	14.3	11.5
25-34	21.0	23.1	26.5	29.1	28.8
35-44	19.9	17.8	18.3	20.7	24.8
45-54	19.2	17.7	15.5	14.3	15.4
55-64	12.8	12.3	11.6	11.0	10.0
65+	3.4	3.4	3.4	3.4	3.4
	100.0	100.0	99.9	100.0	100.0

*Using 1980 "A" rate estimates.

Because of this population bulge, the labor force grew by 1.9% per year from 1970 to 1975, a growth of about 33,500 per year. Between 1975 and 1980, this population bubble caused a labor force growth of 1.8% per year, or about 37,900 per year. (Actual total growth was greater and faster due to changes in the labor force participation rate, and dramatic increases of women in the labor force.)

Between 1980 and 1985, this population bubble will cause a labor force growth of 1.3% per year, or about 30,000 per year. This increase will be primarily in the labor force ages 25-44. This age group will increase about 3.7% per year, or 38,000 per year. There will be fewer young workers ages 16-19, but there is not likely to be any general shortage of workers.

Between 1985 and 1990, the population bubble will be followed by the results of the lower birth rates in the mid-1960's. The labor force will grow only .9% per year due to demographic factors, an annual increase of only about 22,000.

Growth Due to the Participation Rate

During the 1970's, the labor force participation rate grew rapidly. Between 1970 and 1975, Wisconsin's labor force grew at an astounding annual average rate of about 3.22%, or 58,800 per year. Much of this growth was due to the increase in the labor force participation rate.

Between 1975 and 1980, the Wisconsin labor force grew an average of 2.0% per year, or 43,000 per year. The increase in the labor force participation rate had added practically 1.0% per year to the labor force.

To illustrate how great this growth has been, consider 1950 to 1960 growth. The labor force grew from 1,398,000 to 1,647,000, an average of 24,900 per year. Between 1960 and 1970 the labor force grew from 1,647,000 to 1,830,000, an average growth of 18,300 per year.

Changes in the unemployment rate could also add to potential employment growth. The youth unemployment rate is always much higher than the adult rate. The smaller numbers of youth in the labor force in 1985 aand 1990 should reduce the unemployment rate somewhat. At the present, there are a large number of unemployed. There also is a reserve of people who are discouraged, or at least not encouraged, by lack of job opportunities and who are not entering the labor force. So it is unlikely that there will be general shortages of labor in the near future. However, reduced training during periods of high unemployment can add to future shortages of workers with needed skills.

LABOR FORCE PARTICIPATION RATES
1981 and 1983

	1981	1983 Low Est.	1983 High Est.
Total			
16-19 yrs.	67.5%	65.9%	67.4%
20+	65.7%	64.2%	65.7%
	67.7%	66.1%	67.6%
White	67.9%	65.9%	67.4%
16-19 yrs.	66.4%	65.5%	67.1%
20+	68.1%	65.9%	67.4%
Nonwhite	55.7%	66.2%	67.7%
16-19 yrs.	46.2%	43.3%	44.3%
20+	56.8%	68.8%	70.3%
Male	79.6%	77.1%	78.9%
16-19 yrs.	65.7%	63.5%	64.9%
20+	81.2%	78.5%	80.2%
Female	56.3%	55.4%	56.7%
16-19 yrs.	65.8%	65.0%	66.5%
20+	55.3%	54.2%	55.8%

WI. EMPLOYMENT INDEX

1977	98.1	98.0	98.1	98.9	99.9	100.3	100.3	100.7	100.9	101.0	101.5	101.7
1978	102.4	102.8	103.4	103.8	104.2	104.8	105.5	105.7	105.8	106.2	106.6	106.9
1979	106.7	107.6	108.0	108.6	109.1	109.5	109.2	109.1	109.3	110.0	110.0	110.2
1980	109.7	109.6	109.2	108.4	107.5	107.1	106.7	107.0	106.8	106.5	106.8	107.0
1981	107.7	106.9	106.5	106.9	106.9	106.7	107.1	106.9	107.3	106.3	105.8	105.3
1982	106.0	105.3	105.0	104.0	104.3	103.7	103.7	103.4	103.2	102.8	102.3	101.7
1983	102.6	102.2	102.2	102.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

U.S. EMPLOYMENT INDEX

1977	97.7	98.0	98.5	99.0	99.4	99.9	100.3	100.6	101.2	101.5	101.9	102.2
1978	102.4	102.8	103.4	104.4	104.8	105.3	105.6	105.9	106.1	106.5	107.0	107.3
1979	107.5	107.9	108.3	108.3	108.8	109.1	109.2	109.4	109.5	109.6	109.7	109.8
1980	110.0	110.2	110.2	110.1	109.7	109.2	109.1	109.4	109.7	109.9	110.2	110.3
1981	110.5	110.7	110.8	110.9	111.0	111.1	111.4	111.4	111.6	111.4	111.0	110.5
1982	109.7	109.7	109.5	109.2	109.3	108.9	108.6	108.3	108.2	107.8	107.6	107.4
1983	107.8	107.6	107.9	108.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

WI. EMPLOYMENT RATE

1977	53.6	53.5	53.5	53.8	54.2	54.4	54.3	54.5	54.5	54.5	54.7	54.8
1978	55.1	55.2	55.5	55.7	55.8	56.1	56.4	56.4	56.4	56.5	56.7	56.7
1979	56.6	57.0	57.1	57.3	57.5	57.7	57.5	57.3	57.3	57.6	57.5	57.5
1980	57.2	57.0	57.8	56.3	55.7	55.5	55.2	55.3	55.1	55.0	55.1	55.1
1981	55.4	54.9	54.7	54.9	54.8	54.6	54.8	54.7	54.8	54.3	54.0	53.7
1982	53.9	53.5	53.3	52.8	52.8	52.5	52.5	52.2	52.1	51.9	51.6	51.3
1983	51.7	51.5	51.4	51.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

U.S. EMPLOYMENT RATE

1977	51.1	51.2	51.4	51.5	51.7	51.8	52.0	52.0	52.3	52.3	52.5	52.5
1978	52.6	52.7	53.0	53.4	53.5	53.7	53.7	53.8	53.9	53.9	54.1	54.2
1979	54.2	54.3	54.5	54.4	54.5	54.6	54.6	54.6	54.6	54.5	54.5	54.4
1980	54.5	54.5	54.4	54.3	54.0	53.7	53.6	53.7	53.8	53.8	53.9	53.9
1981	53.9	53.9	53.9	53.9	53.9	53.9	54.0	53.9	53.9	53.8	53.5	53.2
1982	52.8	52.8	52.6	52.4	52.3	52.2	52.0	51.8	51.7	51.4	51.3	51.1
1983	51.3	51.2	51.2	51.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EMPLOYMENT INDEX
114
112
110
108
106
104
102
100
98
96
94
Wisconsin Index.....
U.S. Index----------
1978
1979
1980
1981
1982
1983

EMPLOYMENT RATE
Wisconsin Rate.....
U.S. Rate----------
60
59
58
57
56
55
54
53
52
51
50
1978
1979
1980
1981
1982
1983

TRENDS IN UNEMPLOYMENT RATES
(Annual Average Rates)

	Wisconsin	U.S.
1970	3.9%	4.9%
1971	4.6%	5.9%
1972	4.4%	5.6%
1973	4.1%	4.9%
1974	4.5%	5.6%
1975	7.0%	8.5%
1976	5.6%	7.7%
1977	4.9%	7.1%
1978	5.1%	6.1%
1979	4.5%	5.8%
1980	7.1%	7.1%
1981	7.8%	7.6%
1982	10.7%	9.7%
1983 Seasonally Adjusted		
Jan.	11.5%	10.4%
Feb.	11.2%	10.4%
Mar.	11.0%	10.3%
Apr.	10.6%	10.2%

Economic Assumptions 1983 and FFY 1984

Basic Assumptions

The national and international financial systems will be able to withstand any future financial shocks occurring from oil price declines, foreign debt repayments and currency fluctuations.

In addition to being a severe business inventory recession, our current economic outlook is affected to some degree by longer term factors such as the shifting of goods production to lower cost facilities in other nations and by a sharp increase in the rate of introduction in our nation of new and improved production techniques to minimize or overcome our comparative price disadvantages with other nations.

Given these two basic assumptions, we can then comment on the economic outlook for our state and the nation and the expected impact on the labor marketplace the economic outlook will have.

Economic Outlook

The long overdue recovery from the recession is expected to finally take place in 1983 due to the outweighing of negative factors by a larger number of positive factors.

Briefly state, problems that persist for our economy include:

High real interest rates making consumer and capital expenditures expensive by historic standards.

The strong US dollar which makes exporting of US goods and services very difficult.

Large federal deficits which limit government action to reduce unemployment.

Increased ability of foreign nations to produce goods and provide services formerly available only from the US and a handful of developed nations.

Positive factors now expected to provide limited growth (4.0% growth) in the US Gross National Product in 1983 include:

Larger than normal income tax refunds resulting from over withholding of 1982 taxes by IRS.

Reductions in home mortgage rates increased the number of persons financially capable of purchasing homes. (Rates are still very high by historic standards so this improvement is somewhat limited.)

The large amount of transfer payments which continue to support consumer spending.

Future income tax cuts scheduled for July 1, 1983, if allowed to occur, will further increase disposable personal income.

A commitment by the federal reserve system to increase money supply and lower interest rates to insure a recovery.

Lower gasoline and oil prices and pressure to reduce natural gas prices will send fewer dollars overseas and make the funds available for the purchase of other goods and services.

An increased need to replace durable goods due to their increased age and low rate of replacement in the last three years.

Action by Congress and the administration to create some public and private jobs thru the expenditure of federal funds.

On balance, these major positive economic factors should outweigh the negative factors and are expected to result in a mild recovery in 1983. The recovery is now expected to increase real US GNP by about 4.0 percent in 1983 and increase its rate of recovery in FFY 1984.

Labor Market Impact of Economic Assumptions in Wisconsin

Wisconsin needs 38,000 additional jobs each year to keep unemployment from rising and 23,000 jobs to lower unemployment one percent.

Recovery is expected to increase employment by about 30,000 in 1983 and by 66,000 by the end of Federal Fiscal Year 1984.(1)

Thus, unemployment for all of 1983 should rise slightly during 1983, rising about a third of a percent before dropping by a half percent for the 12 months of FFY 1984.

As a result of these changes, Labor Force growth is expected to be 45,000 in 1983 and total 70,000 from the end of 1982 to the end of FFY 1984 (June 30, 1984).

Over the 18-month period (1982-FFY84), employment growth is expected to be centered in the service sector of the economy with employment gains of 55,800 while the goods producing sector increases only 9,200 or about 14 percent.

As recovery continues, the goods producing sector should increase its recovery rate and provide 30 percent of the additional jobs in the last half of FFY84 although the likelihood this sector will eventually recover to 1979 levels is not apparent in the foreseeable future.

Over the entire period, government employment is expected to increase 15,000 as federally supported jobs programs are expected to be expanded at a modest level compensating for job losses in education and other state and local activities.

(1) The Federal Fiscal Year will revert back to a July 1st to June 30th period starting in FFY 1984 (July 1, 1983).

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Actual and Projected Labor Force Changes[1]
By Place of Residence
(Thousands)
(Revised 3-10-83)

	Actual		Projected		Numeric Change Actual	Projected		1983-
	1981	1982	1983	FFY1984	1981-82	1982-83	82-FFY84	FFY19
Civilian Labor Force	2371.0	2450.0	2495.0	2520.0	+79.0	+45.0	+70.0	+25.0
Unemployment	185.0	261.0	275.0	265.0	+76.0	+14.0	+ 4.0	-10.0
Unemployment Rate (%)	7.8	10.7	11.0	10.5	+ 2.9	+ 0.3	- 0.2	- 0.5
Employment	2186.0	2189.0	2220.0	2255.0	+ 3.0	+31.0	+66.0	+35.0

Actual and Projected
Nonfarm Wage and Salary Employment Changes
By Place of Work
(Thousands)
(Revised 3-10-83)

	Employment				Numeric Change			
	Actual		Projected		Actual	Projected		1983-
	1981	1982	1983	FFY 1984	1981-82	1982-1983	82-FFY84	FFY1984
Mining	2.2	1.8	2.3	2.5	- 0.4	+ 0.5	+ 0.7	+ 0.2
Construction	60.7	52.1	56.1	59.6	- 8.6	+ 4.0	+ 7.5	+ 3.5
Durable Manufacturing	349.8	308.3	300.3	305.3	-41.5	- 8.0	- 3.0	+ 5.0
Nondurable Mfg.	193.2	188.0	190.0	192.0	- 5.2	+ 2.0	+ 4.0	+ 2.0
Trans., Comm., Public Utilities	90.8	87.0	88.5	90.5	- 3.8	+ 1.5	+ 3.5	+ 2.0
Trade	432.4	329.6	435.6	441.6	+ 1.7	+ 6.0	+12.0	+ 6.0
Fin., Ins., Real Est.	95.9	97.2	99.2	101.2	+ 1.3	+ 2.0	+ 4.0	+ 2.0
Services	375.9	384.0	396.0	405.3	+ 8.1	+12.0	+21.3	+ 9.3
Government	319.0	319.1	329.1	334.1	+ 0.1	+10.0	+15.0	+ 5.0
TOTAL	1919.9	1867.2	1897.2	1932.2	-52.7	+30.0	+65.0	+35.0

FFY: Federal Fiscal Year. If not preceded with a FFY, time periods are calendar years.

Totals may not add due to rounding and Labor-Management disputes.

(1) Based on the premise that some increase in federal spending occurs during 1983 & FFY84 because of persistent higher unemployment.

1982 SUMMARY

As in 1980 and 1981, recessionary forces continued to depress capital investment in Wisconsin during 1982. The 193 projects reported here is the lowest number since statistics on new and expanding industries was begun. The 1982 volume marks the fourth consecutive year of decline. It was 30 percent lower than the 1981 total. The other indicators of investment activity also were down from the previous year--new jobs - 51 percent, area of new construction - 43 percent and plant and equipment spending - 64 percent.

The climate for capital investment was not a good one. Wisconsin, like the nation, experienced slow economic growth which resulted in record levels of unemployment. The record high interest rates responsible for the drop in investment in 1980 and 1981 fell throughout most of 1982. But they were still relatively high at year-end, with the prime rate at 11.5 percent in December. The downward movement in the borrowing rates appears to have had no effect on encouraging industrial expansion.

NUMBER OF NEW INDUSTRIES AND PLANT EXPANSIONS, CLASSIFIED BY TYPE: 1973-1982

Type	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
Firms New to Community										
New Industry	14	18	13	27	39	40	31	22	33	43
Branch Plant (out-of-state firm)	3	14	10	13	11	17	14	8	17	20
Branch Plant (firm in-state)	5	16	9	24	19	10	7	4	19	27
Relocated Plant (out-of-state firm)	3	7	4	2	3	2	6	9	8	4
Relocated Plant (firm in-state)	8	12	17	20	28	22	17	14	28	11
Subtotal	33	67	53	86	100	91	75	57	105	105
Established Firms										
Plant Additions	137	173	224	351	351	308	228	198	335	415
New Plant (same area)	23	36	35	58	61	64	51	28	48	73
Subtotal	160	209	259	409	412	372	279	226	383	488
TOTAL	193	276	312	495	512	463	354	283	488	593

Source: New Industries and Plant Expansions Reported in Wisconsin, 1982, by Richard Kotenbeutel. Prepared by the Department of Business Development, March 1983.

FIRMS NEW TO THE COMMUNITY, BY COUNTY: 1982

KEY

★ New Business Formation

□ Branch, Out-of-State Firm

■ Branch, State Firm

○ Relocation, Out-of-State Firm

● Relocation, State Firm

Source: New Industries and Plant Expansions Reported in Wisconsin, 1982, by Richard Kotenbeutel. Prepared by the Department of Business Development, March 1983.

EXPANSIONS OF EXISTING COMPANIES BY COUNTY: 1982

KEY

● New Plant

✪ Plant Addition

Source: New Industries and Plant Expansions Reported in Wisconsin, 1982, by Richard Kotenbeutel. Prepared by the Department of Business Development, March 1983.

WISCONSIN - ONE DECADE, TWO RECESSIONS

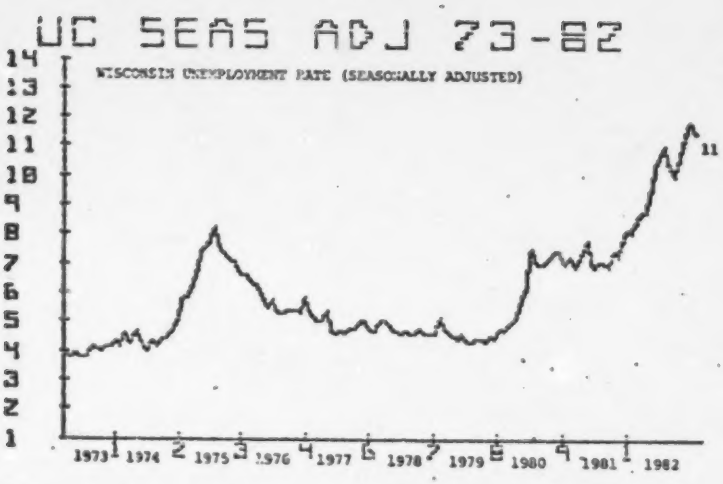
by William K. von Kaas

In an attempt to gain perspective on Wisconsin's economy during this recession, as well as to try to foresee where job openings will probably occur when the recovery starts, it was felt that a study of a past recession would prove instructive.

The 1974-75 recession was chosen for historical perspective because of its recency and because the data would be most uniform with current statistics; that is, prior to 1972, a slightly different version of the Standard Industrial Classification (SIC) manual had been in use. Also, the data from 1973 through 1982 constitutes an even decade, making it particularly convenient to illustrate on graphs.

Accordingly the last decade's industrial data was gathered, seasonally adjusted, and portrayed on individual graphs. On all the graphs on succeeding pages the base line runs from 1973 to 1982, although the numbers represent months starting with 1973. Thus 12 indicates the start of 1974, 24 the start of 1975, and so on. The right edge of each graph, 120, is December 1982.

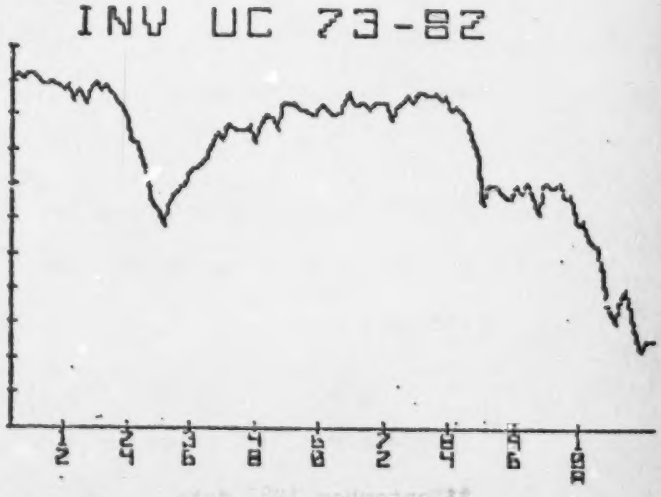
The seasonally adjusted unemployment rate proved to show most graphically the effects of the two recessions, so for the purposes of this study it will be used as a barometer of Wisconsin's economic health.



The 1974-75 recession in Wisconsin turned out to have an almost classic bell-shaped curve. Graph I indicates that the downturn began in late 1974, reached its nadir in mid-1975 and recovered throughout 1976. The slopes on both sides of the "bell" are roughly symmetrical, suggesting that recovery from the recession was nearly as rapid as the decline, although it should be noted that unemployment was slightly higher after the recession than before.

By contrast the current downturn began in mid-1980, reached what appeared to be a plateau, but never began to recover. Unemployment just stayed high, before rising even further in late 1981, and throughout 1982.

In an effort to facilitate comparisons and to observe parallel trends, the unemployment rate shown on Graph I was inverted. When replotted it becomes Graph II, which can be used more easily in comparisons with graphs of employment in various industries shown on succeeding pages.



To provide an initial overview, the major industry groups in Wisconsin will be outlined first. Later the components of manufacturing will be studied in the two major divisions: durable and non-durable goods manufacturing.

* * *

Wisconsin's industries are somewhat proportional in size to the U.S., with certain exceptions.

In order of descending size:

Table I

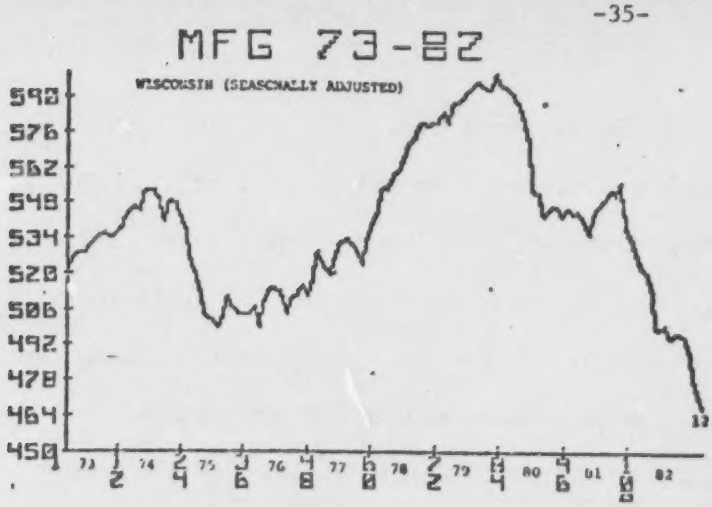
	Wisconsin*	Wis. % of Total	U.S. %** of Total
Total	1,848.3	100.0	100.0
Manufacturing	466.1	25.2	21.1
Trade	438.6	23.7	23.0
Services and Miscellaneous	385.4	20.9	21.5
Government	325.1	17.6	17.0
Finance, Ins., Rl. Estate	97.6	5.3	6.0
Transportation, Public Utilities	85.1	4.6	5.7
Contract Construction	48.1	2.6	4.6
Mining	1.5	.1	1.2

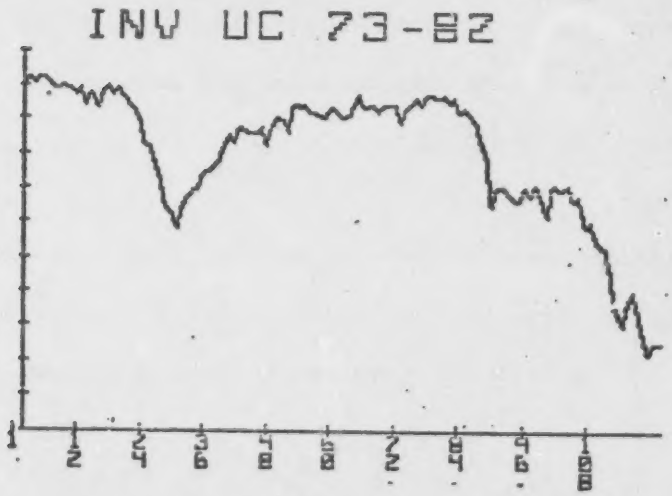
Even though manufacturing unemployment in Wisconsin is down because of the recession, the state still has a higher percentage of its employment in this area than does the nation as a whole. We are under-represented in the areas of Transportation and Public Utilities, Construction (some decline is due to seasonal influences here) and mining.

Nevertheless manufacturing has always played a significant role in Wisconsin's economy and it is appropriate that we observe the current trends in this industry first.

*December 1982 figures in thousands

**September 1982 data





As might be expected, the decline in manufacturing employment in the 1974-75 recession coincided almost exactly with the downturn of the entire economy as measured by the U.C. rate. What is more significant is the fact that manufacturing did not recover with the total economy but lagged until early 1978 before regaining the pre-recession level. Clearly, manufacturing did not give impetus to the recovery. The lesson for the current outlook: we cannot expect manufacturing employment to recover significantly until after the general recovery is well under way.

Moreover, there is some serious question as to whether manufacturing employment will recover to previous high levels very soon, if at all. Many Wisconsin industries are suffering from more than just a temporary lull in demand for their products. Long-range trends are beginning to be felt in many areas, causing fundamental changes.

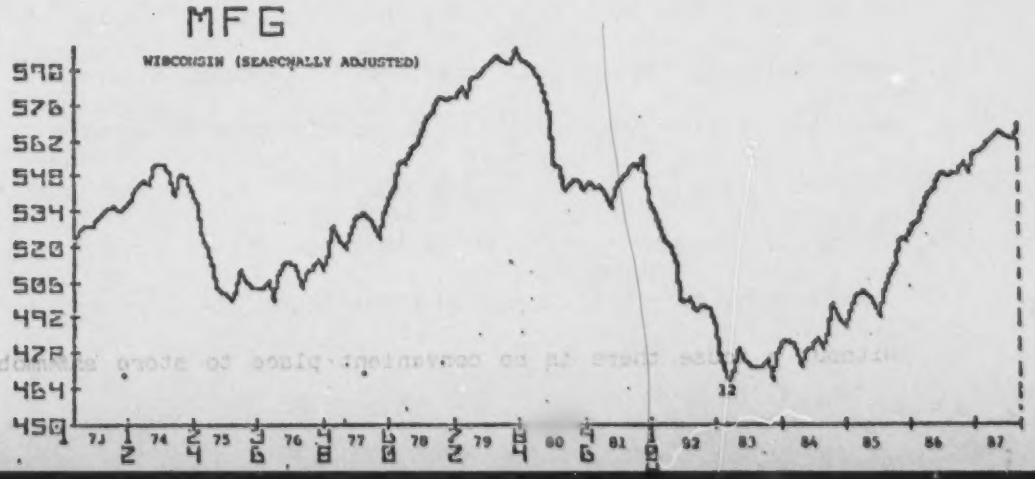
To mention a few obvious effects which should be considered: 1. The trend toward replacing workers with machines (or robots) wherever possible. This is occuring rather dramatically in automobile production as well as less obviously in other areas. 2. The buying habits of the younger and middle-age groups appear to be changing. Fewer of them can afford homes, and thus the need for lawn mowers, furniture, large appliances and the like are reduced. Moreover, without a house there is no convenient place to store snowmobiles, power boats

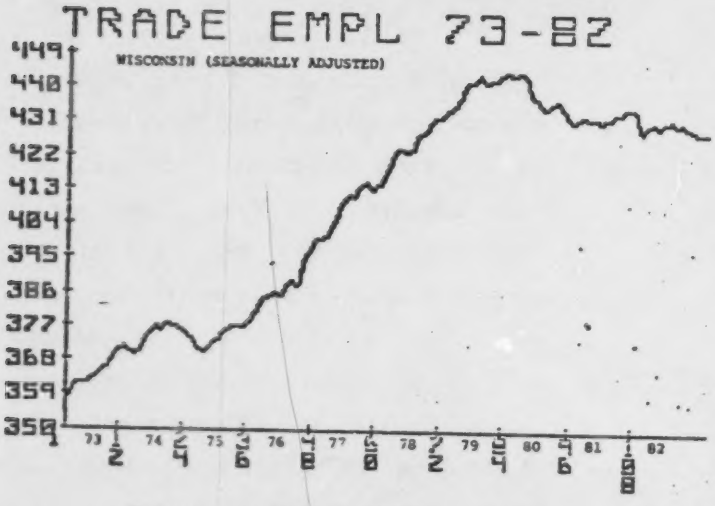
with outboard motors, and similar recreational items that Wisconsin produces. 3. Manufacturers taken as a group are currently operating at less than 70% of their plant capacity. Until their sales rise to higher levels there is little need to expand production facilities, so the purchase of capital goods--such as machine tools--will not rise appreciably for a time. This is particularly true in the manufacture of products for construction, mining and agricultural usage--fields for which much heavy equipment is made in this state. 4. The competition from overseas producers, whose labor costs are significantly lower, should also be evident to any observer. Wisconsin manufacturers are no less susceptible to foreign competition than producers in other states.

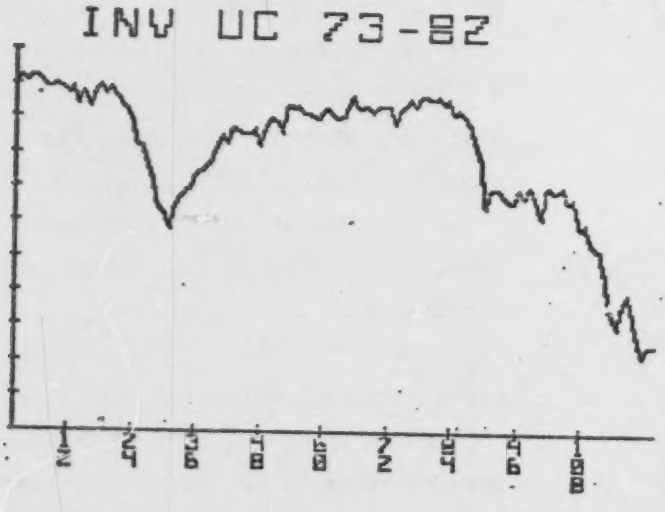
* * *

If the same rate of recovery that occurred in 75-79 in manufacturing employment were projected onward from December 1982 (see graph #IV below) it can be seen that by the end of 1987--4 1/2 years from now--employment would not reach its 1979 level.

It could be argued that this may be a pessimistic approach, that manufacturing should recover faster than last time. Yet considering: 1) The high rate of business failures during the last 2 1/2 years, companies whose employment won't return soon if ever, 2) The length and intensity of the current recession, 3) The additional factors relating to Wisconsin's industrial mix as previously mentioned, a recovery as fast as the 75-79 recovery could well be considered optimistic.







Trade employment by contrast, did not suffer as greatly during the previous recession. A small dip occurred in 1975, but a sustained period of growth began in the same year and continued until peaking about 1979. It is apparent that trade supplied the "engine" that pulled Wisconsin out of the 1974-75 recession: this was the time of growth for suburban shopping centers and hamburger stands (eating and drinking establishments are considered part of trade).

However, the fact that trade peaked in 1979-80 and has slowly declined since then raises the question as to whether a saturation point has been reached beyond which trade is unlikely to grow appreciably. Consumers can support only a given number of stores and restaurants; beyond this point one establishment can grow only by taking business away from another. Whether this point had been reached prior to the current recession, or whether the downturn in trade is caused only by the recession is a debatable point.

Another trend in the trade area is the use of fewer clerks, aided by optical scanners, to record sales. The decrease of sales help in some stores is already apparent. In any case it is unreasonable to expect that trade will again expand enough to provide the growth necessary to stimulate a recovery in the rest of Wisconsin's economy. Even slow growth in trade would be a serious limitation for the state's recovery.

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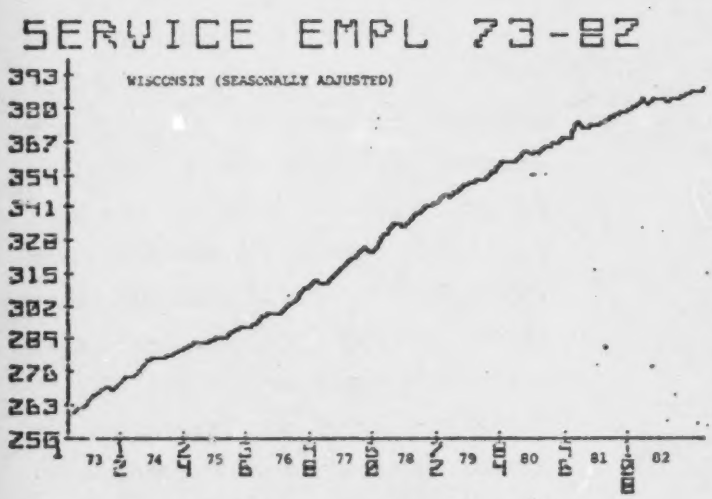
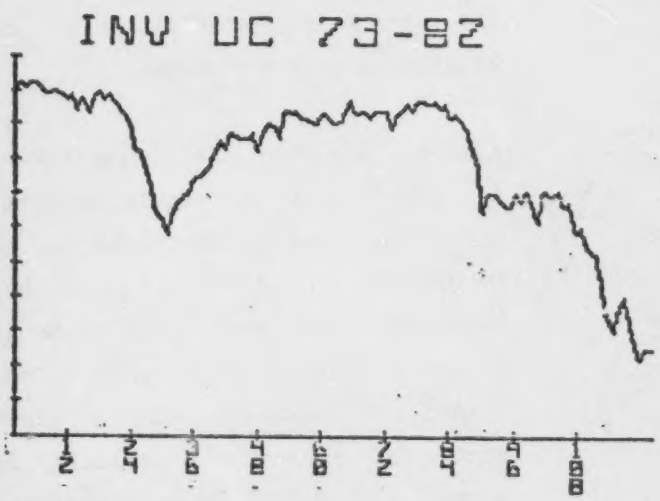




Service constitutes a very heterogeneous grouping, and consequently it is more difficult to analyze this industry. At first glance service appears to show a rather steady growth rate during the decade, but a straight line drawn through the graph indicates deviations. Service was slightly affected by the 1974-75 recession; its growth dipped somewhat. It is also affected by the current recession--a little more significantly perhaps; its growth continues, but at a slower pace. While growth is expected to continue, service is not likely to provide employment for the vast numbers of workers displaced from other industries, notably manufacturing, nor is it sufficient to provide jobs for all of the many new entrants into the labor market. At best, employment in service taken as a whole, is growing only slowly.

* * *

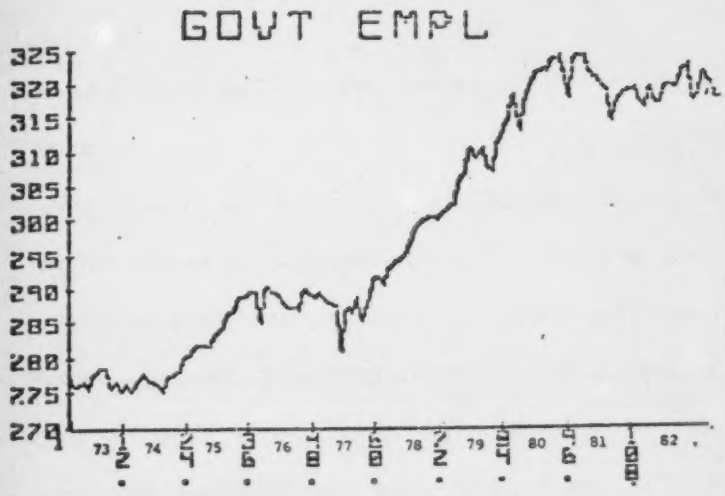
Largely because of this steady growth for the last ten years, the service sector is projected to expand significantly in the years ahead. Some projections foresee as much as 33% growth by 1990.

Medical services, including hospital employment, doctors, dentists, and health services, comprise about 40% of the service industry, and they are mostly res-

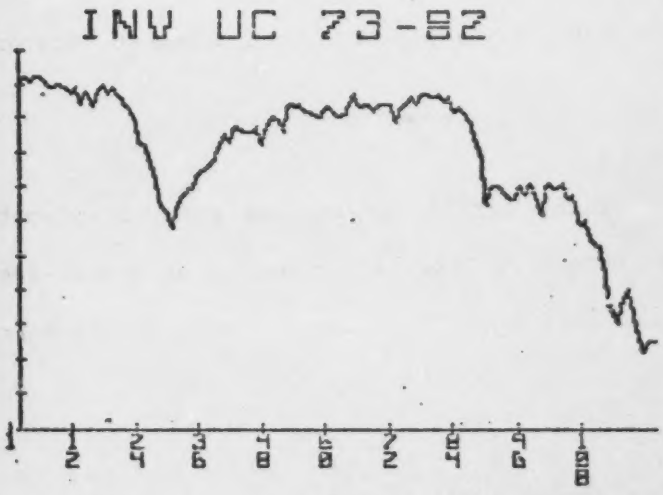
ponsible for the great increase in employment in recent years. Yet it is interesting to speculate as to whether they can add almost a third again as many workers as are currently employed without significantly taxing the already burdened health insurance systems, both private and governmental. Moreover there is also the question of need; we may have almost reached the necessary capacity for treating most of the state's population in existing facilities. A one-third growth in the next decade may be somewhat superfluous. The tapering off in the rate of growth in employment in the medical area, which began previous to the current recession, suggests this possibility. Growth in medical services, then, will undoubtedly continue but quite possibly at a somewhat reduced rate.

Private education, a smaller part of the service group, has grown by almost five thousand in the last decade: With a decline in the number of school-age children, this unit will likely show only minor increases, if any, in the near future.

The remaining service employment is found in hotels and motels, business services, personal services, repair including automotive, motion picture and other amusement and recreation, social services, and employment in museums, art gallaries and zoos -- All in all, a very diverse group. Such activities can reasonably be expected to expand somewhat, but most expansion will probably accompany a general economic recovery rather than initiate it.



Government employment has traditionally been regarded as rather constant, unaffected by fuctuations in the business cycle. Wisconsin's recent experience does not bear this out. Government employment was quite visably affected by the 1974-75 recession in that its growth rate temporarily flattened out. This didn't occur until after the recession had affected other industries first, but nevertheless the effect was noticable.



The surge in government employment which began in 1979, extended through 1980 and declined slightly in 1981 can partially be explained by the added manpower necessary to conduct the 1980 census. However, this does not fully account for the lack of significant growth since that time. Again this recession is apparently having an adverse effect on government employment.

It should be remembered that this measure of employment includes teachers, professors, and employes of state and federal social-service agencies, prisions, hospitals, and the like. In a time of expanding population such as the present, these government services of necessity should be expanding as a simple function of population growth. A plateau such as currently exists actually represents a decrease in government services per capita.

Patently the recent (since 1980) flattening in government employment does not suggest much likelihood that a substantial rise will occur in the near future.

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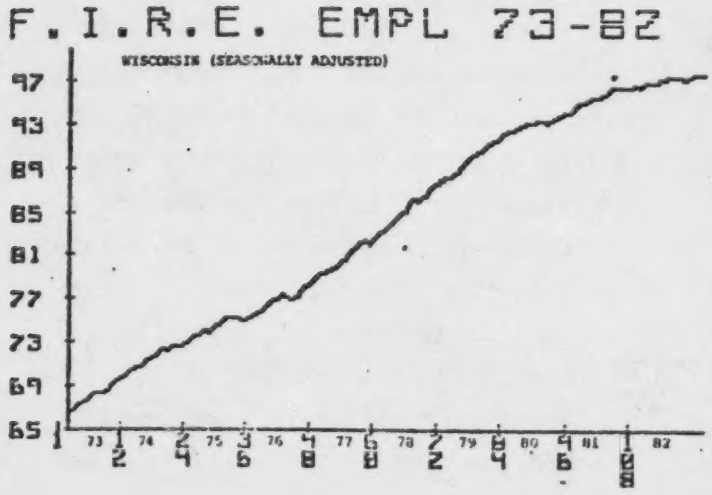
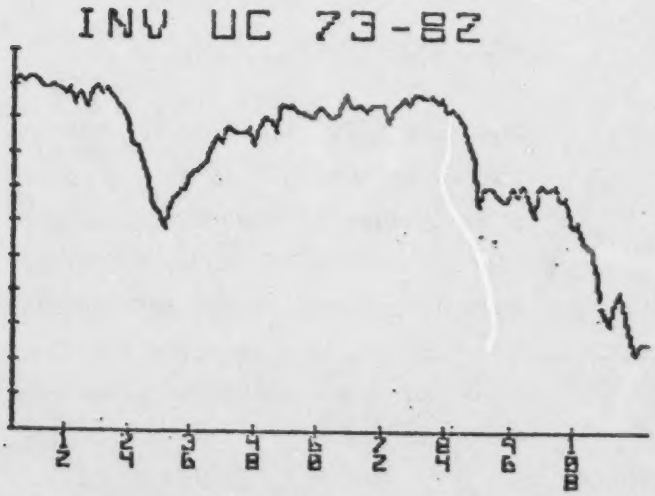


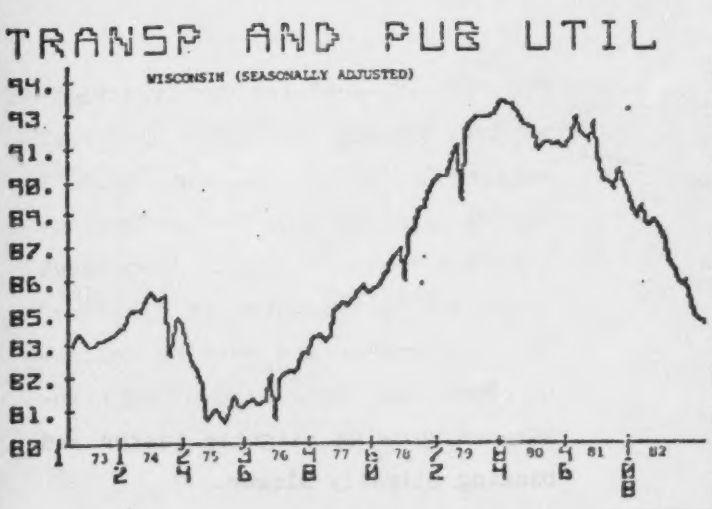
The 1974-75 recession barely affected the finance insurance and real estate industry, causing only a slight pause in late 1975 before resuming very rapid growth throughout 1976-1980, after which it flattened out. Insurance and banking followed about the same course, with insurance growing slightly faster and banking slightly slower.



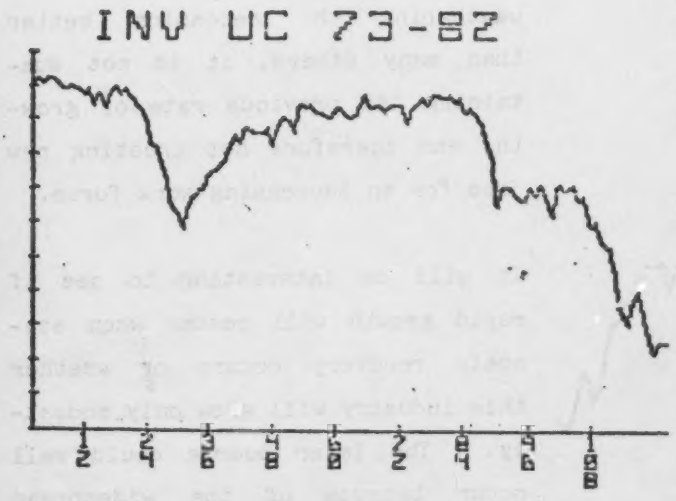
While this industry appears to be weathering the recession better than many others, it is not sustaining its previous rate of growth, and therefore not creating new jobs for an increasing work force.

It will be interesting to see if rapid growth will resume when economic recovery occurs or whether this industry will grow only modestly. The later course could well occur because of the widespread introduction of computers and the effects of a slow market in real estate.

In either case, since the entire industry represents only about 5.3% of the state's non-farm wage and salary employment, this industry can only help during a recovery rather than carry one.



Although transportation, communications, electric gas and sanitary services combine very diverse activities, it is apparent that the combined group is comparatively recession-prone. As less goods are manufactured, less need to be transported. Similarly there is less need to generate power for factories, many of which are on reduced hours or closed. Although employment in the public utility sector hasn't declined as much as in the transportation area, its growth has leveled off and there is no expansion.



The fact that this industry has not fallen to the 1974-75 low is probably because of the larger population which must be clothed, fed and otherwise cared for. Additionally there is nearly a decade's construction of new buildings requiring heat and power.

Recovery in this industry will probably coincide with economic recovery in general throughout Wisconsin: it obviously will not precede it.

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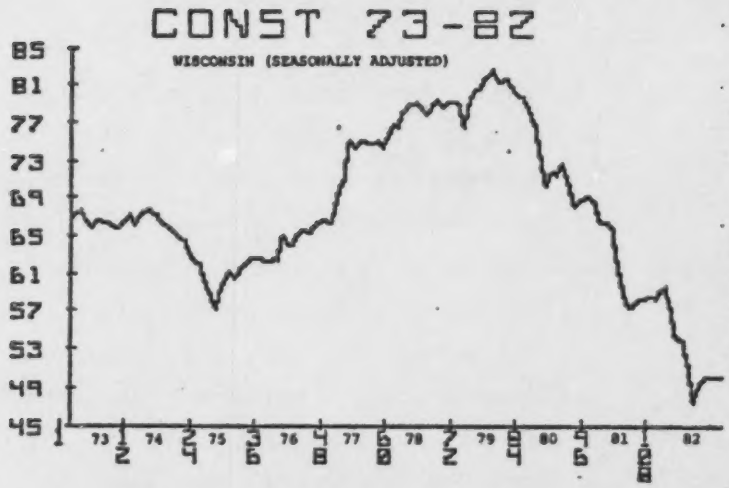
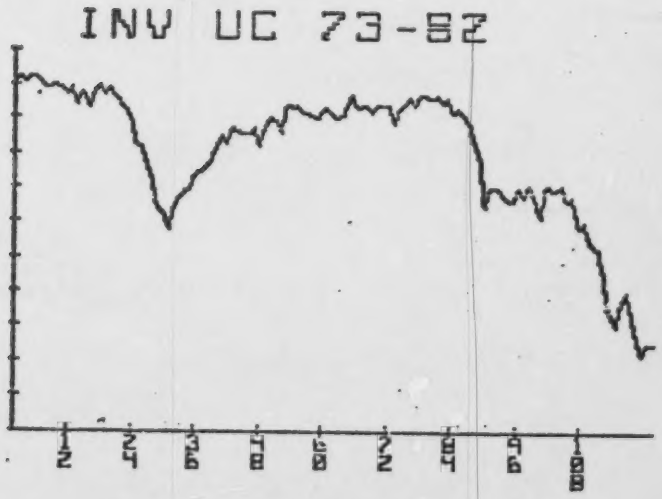


Construction employment has declined almost proportionally with the recession, suffering severly from high interest rates and lack of commercial building projects initiated by both private and public investment. Like the unemployment rate the current downturn has exceeded the 1974-75 recession, reflecting the severity of the present situation.



Many economists look to the construction area to pull the nation's economy out of the doldrums. However in Wisconsin it should be noted that construction is at a low base to start with; many previous employes must be recalled before any new hiring can occur. Moreover, the entire industry represents only a small (2.6%) of the state's work force (as of December 1982). Even considering employment in the manufacture of construction supplies it does not appear that construction in and of itself can provide the impetus for recovery.

Wisconsin's weather causes great seasonal variations in construction activity. The implications of these variations mean: 1. That an upturn in construction employment will usually occur in the spring of the year, and 2. That any upturn will necessarily be preceded by building plans approvals well in advance of actual hiring. Thus the number of plans approved is an excellent harbinger of future employment needs.

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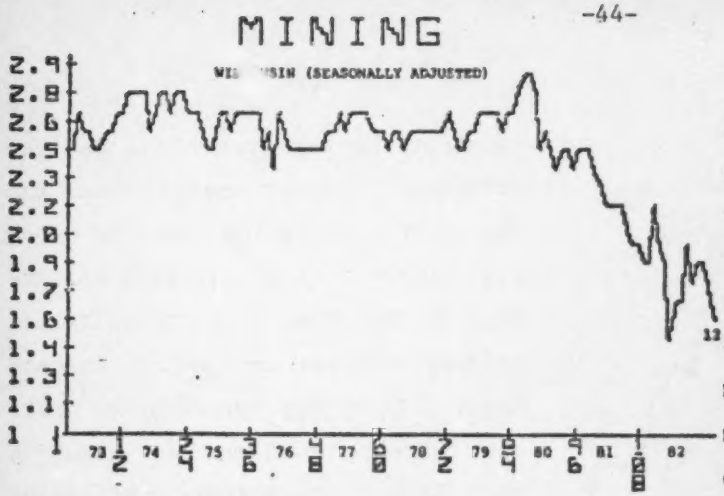

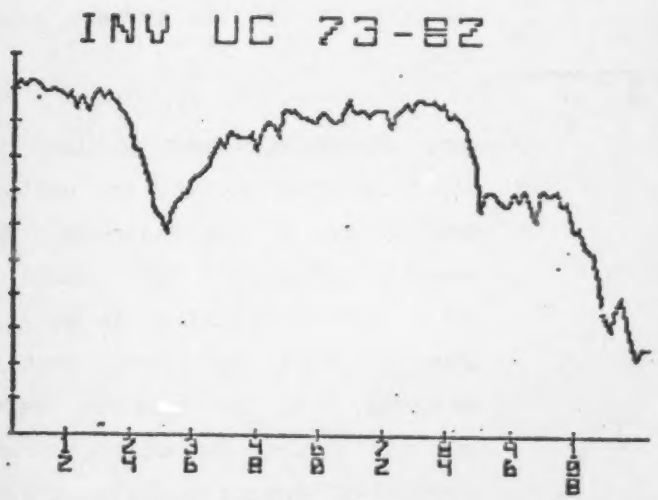

Mining represents the smallest part of Wisconsin's economy and thus of its work force. It is mentioned here only to complete the view of all segments of the state's economy. It is obvious that employment has suffered in this area--far more so in fact than in the 1974-75 downturn. This is a reflection of the dependence which mining has on construction, inasmuch as the state's major mining activity is actually quarrying for materials used in highway and building construction purposes, along with some limestone which is exported for steelmaking.

Recovery in mining, therefore, is largely dependent on recovery in the construction field.

* * *

Summary--Conclusions

From these graphs, certain observations can be made about industry trends and job prospects throughout Wisconsin.

1. The two recessions are very different. While the 1974-75 recession was probably more typical of the short-cycle downturns we have experienced since World War II, the current recession is not a "typical" recession. This time, different industries are affected and affected in different ways: longer term trends are emerging and beginning to exert their influences. Recovery is apt to proceed more slowly and to follow a different course.

2. Wisconsin's experience in this recession and that of the rest of the nation are considerably different this time. Despite having a somewhat proportional industrial mix, the product mix of Wisconsin manufacturers has resulted in a more severe recession here (and in the Midwest) than in the rest of the country, and it can be hypothiesized that recovery here will be delayed. Because of our heavy concentration of durable goods manufacturers, unemployment will likely remain high even after other segments of the state's economy have come back. The large numbers of entrants into the labor force in the next few years will further exacerbate the problem.

3. This is not to say that many individual companies will not prosper and expand before a more general recovery. Indeed, some individual companies are countercyclical and have done better during recessions than during more prosperous times.

4. According to two recent studies, more job growth is likely to occur in smaller companies than in larger ones, and more often in recently organized companies.

"The establishments generating new jobs tend to be:

- Small. About two-thirds of all new new jobs between 1969 and 1976 were created by firms with 20 or fewer employes.

- Young. About 80% of all "replacement" jobs between 1969 and 1976 were generated by establishments in business four years or less.

- Volatile. Job generators tend to move through periods of expansion and retrenchment as they grow.

Virtually none of the difference in the job generation capability of labor markets is due to firms' moving their staffs and physical plants to different areas. Few businesses relocate, and when they do they move short distances."*

*"Tracking Job Growth in Private Industry" by Richard Greene, Monthly Labor Review, September 1982.

Obvi ously the reason many jobs were created in small firms those years was the rapid growth in the trade area, which includes eating and drinking establishments--jobs such as retail store clerks and counter help in hamburger stands which have proliferated in recent years. Yet a look at the large manufacturing concerns in Wisconsin confirms that few of them have expanded appreciably; most have lost employment. Therefore, keeping an eye on small firms is prudent whether they are in manufacturing or non-manufacturing.

The unfortunate corollary is the fact that few of these jobs pay as well as the factory jobs which are disappearing. Many laid-off workers will have to adjust to lower pay scales.

* * *

While this view of Wisconsin's economy may not appear as roseate as some others, it is to be hoped that it will help provide better understanding of the state's industrial situation--of where we are and where we are apt to be going--to assist economists, government planners and job developers in their efforts.

WISCONSIN SHIFT-SHARE ANALYSIS
(Jan.-Jul. 1980 Avg. to Jan.-Jul. 1982 Avg.)

Industry	Employment Growth (Thous.)	National Growth Element	Industry Mix Element	Wisconsin Competitive Element
Construction	-15.7	1.1%	39.5%	59.4%
Manufacturing	-64.3	2.3%	52.9%	44.8%
Transportation Communication and Publi. Utilities	- 4.1	5.8%	23.2%	71.0%
Trade	- 8.8	12.7%	-103.6%	191.0%
Finance, Insurance and Real Estate	4.0	- 6.0%	108.0%	- 2.0%
Service	22.0	- 4.2%	113.2%	- 9.0%

Shift-share analysis identifies the impact of various economic forces on employment growth. The analysis ascribes employment growth in the state to three components: national growth, industry mix, and state competitive effect. The national growth element measures the state's share in the nation's economic growth. In this analysis, because national employment from 1980 to 1982 was small, the national element contributes relatively little to Wisconsin's employment change. The industry mix element attributes an industry's employment growth in the state to the health of that particular industry among all industries. This element was particulary significant in Wisconsin's Trade, in Finance, Insurance and Real Estate and in the state's Service industries. Note that in the state's Trade industries where there was employment loss, the minus percent of over one-hundred prevented that loss from being double of what it was. The state competitive element identifies the state's competitiveness in an industry compared to that same industry nationwide. This element is high in those Wisconsin industries which had employment loss.

EMPLOYMENT DEVELOPMENTS AND OUTLOOK: BY OCCUAPATION

Occupational Employment Analysis

	1974 Employment		1974-85 Projected Growth		
	Number	Percent of Total Employment	Number	Percent Increase	Percent of Total Growth
TOTAL	1,978,110	100.0	195,890	9.9	100.0
Professional, Technical and Kindred*	262,090	13.2	30,130	11.49	15.4
Managers, Officials	183,570	9.3	26,800	14.6	13.7
Sales	113,500	5.7	14,250	12.6	7.3
Clerical	282,970	14.3	38,120	13.47	19.5
Craft Workers	250,230	12.7	30,370	12.1	15.55
Operatives	358,370	18.1	21,640	6.0	11.0
Service Workers	250,080	12.6	41,940	16.8	21.4
Laborers, Except Farm	86,360	4.4	9,220	10.7	4.7
Farmers and Farm Workers	190,940	9.7	(-16,580)	(- 8.7)	(- 8.5)

*Census Occupational Codes

Note: Projected growth figures are listed here, but these figures do not include replacement openings. The latter data is not available; for a further explanation, please refer to source publication: Wisconsin Employment: Occupational Projections to 1985.

It should be noted that under normal circumstances replacement needs (arising from labor force separations due to retirements, deaths, women leaving the labor force to raise families, etc.) will account for a far larger number of job openings than those which occur as a result of expansion or growth. In some occupational areas, as many as nine or ten times the openings will result from replacement needs as from growth; yet these estimates are difficult to quantify, inasmuch as they vary considerably from occupation to occupation and fluctuate with the business cycle.

Even in large occupations with stable or declining growth, such as certain clerical occupations, more openings will be generated through replacement need than other occupations may have through growth.

Please note also that projected growth figures are employment growth, not occupational demand. They represent the point at which supply and demand intersect, and thus do not reflect either an oversupply of trained workers or an unmet demand.

JOB SERVICE NONAGRICULTURAL OPENINGS RECEIVED

	FY 1982	FY 1981	Decline	% Decline
TOTAL	59,605	93,245	-33,640	-36.1%
Professional, Technical and Managerial	5,136	10,189	- 5,053	-49.6%
Clerical and Sales	16,126	23,632	- 7,506	-31.8%
Service	17,758	25,173	- 7,415	-29.5%
Agriculture and Related	2,344	4,383	- 2,039	-46.5%
Processing	2,463	3,782	- 1,319	-34.9%
Machine Trades	2,600	4,845	- 2,245	-46.3%
Bench Work	2,807	4,038	- 1,231	-30.5%
Structural Work	3,036	6,067	- 3,031	-50.0%
Transportation, Material Handling and Miscellaneous	7,253	10,958	- 3,705	-33.8%

Although this severe decline in orders is in large part because of the recession, part is also because budget restrictions necessitated the closing of many small district Job Service offices.

Source: ESARS Table 96

COMPARISON OF JOB SERVICE APPLICATIONS TO JOB SERVICE NONAGRICULTURAL OPENINGS RECEIVED
FY 1982 (ending Sept. 30, 1982)

	Active Applications	Openings Received	Ratio Column 1 to Column 2
TOTAL	450,903	59,605	7.6:1
Professional, Technical and Managerial	53,708	5,136	10.5:1
Clerical and Sales	97,719	16,126	6.1:1
Service	70,946	17,758	4.0:1
Agriculture and Related	8,322	2,344	3.6:1
Processing	18,049	2,463	7.3:1
Machine Trades	45,027	2,600	17.3:1
Bench Work	29,878	2,807	10.6:1
Structural Work	51,139	3,036	16.8:1
Transportation, Material Handling and Miscellaneous	73,486	7,253	10.1:1

Source: ESARS Table 96

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 000000 - TOTAL, ALL INDUSTRIES

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	1,938,250	2,286,270	348,020	18.0
10000000	PROFESS,TECHNL & KINDRED OC	315,480	382,490	67,030	21.2
10020000	ENGINEERS	19,380	24,380	5,000	25.8
10040000	LIFE & PHYSICAL SCIENTISTS	3,480	4,050	570	16.4
10060000	MATHEMATICAL SPECIALISTS	520	640	120	23.1
10080000	ENGINEERING,SCIENCE TECHNS	21,090	26,050	4,960	23.5
10100000	MEDICAL WORKERS,EX TECHNS	40,710	56,480	15,770	38.7
10120000	OTHER HEALTH TECHNOLS & TECHNS	30,220	40,710	10,490	34.7
10140000	TECHNICIANS,EX HEALTH OR SCI	5,990	6,930	940	15.7
10160000	COMPUTER SPECIALISTS	8,600	12,860	4,260	49.5
10180000	SOCIAL SCIENTISTS	2,990	3,640	650	21.7
10200000	TEACHERS	88,170	91,340	3,170	3.6
10220000	WRITERS,ARTISTS,ENTERTAINERS	13,590	16,660	3,070	22.6
10240000	OTH PROFESSIONAL & TECHN WKRS	80,710	98,750	18,040	22.4
20000000	MANAGERS & OFFICIALS	169,750	200,350	30,600	18.0
20020000	SALES MANAGERS	5,150	6,330	1,180	22.9
20040000	ADMINISTRATORS,PUB INSPECTORS	11,930	13,380	1,450	12.2
20060000	OTHER MANAGERS,OFFICIALS,PROPS	152,670	180,640	27,970	18.3
30000000	SALES WORKERS	117,830	143,020	25,190	21.4
40000000	CLERICAL WORKERS	354,300	421,100	66,800	18.9
40020000	STENOS,SECRETARIES,& TYPISTS	67,900	83,020	15,120	22.3
40040000	OFFICE MACHINE OPERATORS	19,170	22,420	3,250	17.0
40060000	OTHER CLERICAL WORKERS	267,230	315,660	48,430	18.1
50000000	CRAFTS & KINDRED WORKERS	214,580	245,630	31,050	14.5
50020000	CONSTRUCTION CRAFTS WORKERS	44,540	50,410	5,870	13.2
50040000	BLUE COLLAR WORKER SUPVSRS	24,700	28,040	3,340	13.5
50060000	METAL WKG CRAFTS WKRS,EX MECH	25,330	28,040	2,710	10.7
50080000	MECHS,REPAIRERS,INSTALLERS	45,020	53,900	8,880	19.7
50100000	PRINTING TRADE CRAFTS WKRS	12,210	13,270	1,060	8.7
50120000	TRANS,PUB UTIL CRAFTS WKRS	9,040	9,500	460	5.1
50140000	OTHER CRAFTS,KINDRED WORKERS	53,740	62,470	8,730	16.2
61000000	OPERATIVES,EX TRANSPORTATION	217,700	244,900	27,200	12.5
61020000	SEMISKILLED METALWORKING OPS	55,980	64,740	8,760	15.6
61040000	SEMISKILLED TEXTILE OPERATIVES	940	920	-20	-2.1
61060000	SEMISKLD PACKNG,INSPECTING OPS	21,300	23,200	1,890	8.8
61080000	OTHER OPERATIVES,EX TRANSPORT	139,420	156,100	16,680	12.0
62000000	TRANSPORT EQUIP OPERATIVES	78,570	89,120	10,550	13.4
63000000	ALL OTHER OPS & SEMISKILLED WKRS	37,710	41,850	4,140	11.0
70000000	SERVICE WORKERS	303,190	375,250	71,390	23.5
70020000	CLEANING SERVICE WORKERS	54,500	65,810	11,310	20.8
70040000	FOOD SERVICE WORKERS	147,290	179,770	32,480	22.1
70060000	HEALTH SERVICE WORKERS	37,130	49,650	12,520	33.7
70080000	PERSONAL SERVICE WORKERS	19,960	26,500	6,540	32.8
70100000	PROTECTIVE SERVICE WORKERS	30,200	36,210	6,010	19.9
70120000	PRIVATE HOUSEHOLD WORKERS	930	1,310	380	40.9
70200000	OTHER SERVICE WORKERS	13,060	16,030	2,970	15.7
80000000	LABORERS,EX FARM	127,540	141,560	14,020	11.0
90000000	FARMERS & FARM WORKERS	910	910	0	.0
90020000	FARMERS & FARM MANAGERS	30	30	0	.0
90040000	FARM LABORERS, FARM SUPERVISORS	890	890	0	.0

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 100000 - AGRICULTURAL, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	5,460	5,460	0	.0
10000000	PROFESS,TECHN,& KINDRED OC	420	420	0	.0
10020000	ENGINEERS	0	0	0	.0
10040000	LIFE & PHYSICAL SCIENTISTS	30	30	0	.0
10060000	MATHEMATICAL SPECIALISTS	0	0	0	.0
10080000	ENGINEERING,SCIENCE TECHNS	70	70	0	.0
10100000	MEDICAL WORKERS,EX TECHNS	140	140	0	.0
10120000	OTHER HEALTH TECHNOLS & TECHNS	0	0	0	.0
10140000	TECHNICIANS,EX HEALTH OR SCE	30	30	0	.0
10160000	COMPUTER SPECIALISTS	0	0	0	.0
10180000	SOCIAL SCIENTISTS	0	0	0	.0
10200000	TEACHERS	0	0	0	.0
10220000	WRITERS,ARTISTS,ENTERTAINERS	60	60	0	.0
10240000	OTH PROFESSIONAL & TECHN WKRS	90	90	0	.0
20000000	MANAGERS & OFFICIALS	260	260	0	.0
20060000	OTHER MANAGERS,OFFICIALS,PROPS	260	260	0	.0
30000000	SALES WORKERS	60	60	0	.0
40000000	CLERICAL WORKERS	420	440	20	4.8
40020000	STENOS,SECRETARIES,& TYPISTS	140	160	20	14.3
40040000	OFFICE MACHINE OPERATORS	10	10	0	.0
40060000	OTHER CLERICAL WORKERS	270	270	0	.0
50000000	CRAFTS & KINDRED WORKERS	300	300	0	.0
50020000	CONTRUCTION CRAFTS WORKERS	50	50	0	.0
50040000	BLUE COLLAR WORKER SUPVSRS	120	120	0	.0
50060000	METAL WKG CRAFTS WKRS,EX MECH	0	0	0	.0
50080000	MECHS,REPAIRERS,INSTALLERS	60	60	0	.0
50120000	TRANS,PUB UTIL CRAFTS WKRS	0	0	0	.0
50140000	OTHER CRAFTS,KINDRED WORKERS	80	80	0	.0
61000000	OPERATIVES,EX TRANSPORTATION	20	20	0	.0
61020000	SEMISKILLED METALWORKING OPS	0	0	0	.0
61080000	OTHER OPERATIVES,EX TRANSPORT	20	20	0	.0
62000000	TRANSPORT EQUIP OPERATIVES	130	130	0	.0
63000000	ALL OTHER OPS & SEMISKILLED WKRS	150	130	-20	-13.3
70000000	SERVICE WORKERS	60	60	0	.0
70020000	CLEANING SERVICE WORKERS	30	30	0	.0
70040000	FOOD SERVICE WORKERS	0	0	0	.0
70060000	HEALTH SERVICE WORKERS	20	20	0	.0
70080000	PERSONAL SERVICE WORKERS	0	0	0	.0
70100000	PROTECTIVE SERVICE WORKERS	10	10	0	.0
80000000	LABORERS,EX FARM	2,710	2,710	0	.0
90000000	FARMERS & FARM WORKERS	910	910	0	.0
90020000	FARMERS & FARM MANAGERS	30	30	0	.0
90040000	FARM LABORERS, FARM SUPERVISORS	890	890	0	.0

OLS INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 200000 - MINING, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	2,500	3,000	440	17.2
10000000	PROFESS,TECHN,& KINDRED OC	70	80	10	14.3
10020000	ENGINEERS	10	10	0	.0
10040000	LIFE & PHYSICAL SCIENTISTS	10	10	0	.0
10050000	ENGINEERING,SCIENCE TECHNS	10	10	0	.0
10240000	OTH PROFESSIONAL & TECHN WKRS	50	60	10	20.0
20000000	MANAGERS & OFFICIALS	270	320	50	18.5
20060000	OTHER MANAGERS,OFFICIALS,PROPS	270	320	50	18.5
30000000	SALES WORKERS	30	30	0	.0
40000000	CLERICAL WORKERS	230	270	40	17.4
40020000	STENOS,SECRETARIES,& TYPISTS	40	40	0	.0
40050000	OTHER CLERICAL WORKERS	190	220	30	15.8
50000000	CRAFTS & KINDRED WORKERS	640	750	110	17.2
50020000	CONSTRUCTION CRAFTS WORKERS	370	430	60	16.2
50040000	BLUE COLLAR WORKER SUPVSRS	100	120	20	20.0
50060000	METAL WKG CRAFTS WKRS,EX MECH	0	0	0	.0
50080000	MECHS,REPAIRERS,INSTALLERS	100	120	20	20.0
50140000	OTHER CRAFTS,KINDRED WORKERS	70	80	10	14.3
61000000	OPERATIVES,EX TRANSPORTATION	450	530	80	17.8
61020000	SEMISKILLED METALWORKING OPS	60	70	10	16.7
61060000	SEMISKLD PACKNG,INSPECTNG OPS	10	10	0	.0
61030000	OTHER OPERATIVES,EX TRANSPORT	390	450	60	15.4
62000000	TRANSPORT EQUIP OPERATIVES	620	730	110	17.7
63000000	ALL OTHER OPS & SEMISKILLED WKRS	20	20	0	.0
70000000	SERVICE WORKERS	20	20	0	.0
70020000	CLEANING SERVICE WORKERS	10	20	10	100.0
70100000	PROTECTIVE SERVICE WORKERS	0	0	0	.0
80000000	LABORERS,EX FARM	220	250	30	13.6

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 300000 - CONSTRUCTION, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	70,100	81,200	11,100	15.8
10000000	PROFESS,TECHN,& KINDRED OC	2,690	3,240	550	20.4
10020000	ENGINEERS	420	510	90	21.4
10040000	LIFE & PHYSICAL SCIENTISTS	0	0	0	.0
10080000	ENGINEERING,SCIENCE TECHNS	460	590	130	28.3
10140000	TECHNICIANS,EX HEALTH OR SCI	0	0	0	.0
10160000	COMPUTER SPECIALISTS	40	50	10	25.0
10240000	OTH PROFESSIONAL & TECHN WKRS	1,780	2,090	310	17.4
20000000	MANAGERS & OFFICIALS	8,390	9,870	1,480	17.6
20060000	OTHER MANAGERS,OFFICIALS,PROPS	8,390	9,870	1,480	17.6
30000000	SALES WORKERS	990	1,140	150	15.2
40000000	CLERICAL WORKERS	6,110	7,520	1,410	23.1
40020000	STENOS,SECRETARIES,& TYPISTS	2,020	2,680	660	32.7
40040000	OFFICE MACHINE OPERATORS	140	160	20	14.3
40060000	OTHER CLERICAL WORKERS	3,960	4,680	720	18.2
50000000	CRAFTS & KINDRED WORKERS	35,920	40,850	4,930	13.7
50020000	CONTRUCTION CRAFTS WORKERS	27,970	31,630	3,660	13.1
50040000	BLUE COLLAR WORKER SUPVSRS	850	1,050	200	23.5
50060000	METAL WKG CRAFTS WKRS,EX MECH	2,580	2,850	270	10.5
50080000	MECHS,REPAIRERS,INSTALLERS	2,210	2,600	390	17.6
50120000	TRANS,PUB UTIL CRAFTS WKRS	610	720	110	18.0
50140000	OTHER CRAFTS,KINDRED WORKERS	1,700	1,990	290	17.1
61000000	OPERATIVES,EX TRANSPORTATION	2,580	2,980	400	15.5
61020000	SEMISKILLED METALWORKING OPS	340	400	60	17.6
61060000	OTHER OPERATIVES,EX TRANSPORT	2,240	2,580	340	15.2
62000000	TRANSPORT EQUIP OPERATIVES	2,110	2,460	350	16.6
63000000	ALL OTHER OPS & SEMISKILLED WKRS	1,010	1,200	190	18.8
70000000	SERVICE WORKERS	640	750	110	17.2
70020000	CLEANING SERVICE WORKERS	610	720	110	18.0
70100000	PROTECTIVE SERVICE WORKERS	20	20	0	.0
70200000	OTHER SERVICE WORKERS	10	10	0	.0
80000000	LABORERS,EX FARM	9,070	11,180	1,510	15.8

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 400000 - MANUFACTURING, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	558,030	622,490	64,460	11.6
10000000	PROFESS,TECHN,& KINDRED OC	43,500	52,420	8,920	20.5
10020000	ENGINEERS	12,790	15,880	3,090	24.2
10040000	LIFE & PHYSICAL SCIENTISTS	1,320	1,570	250	18.9
10060000	MATHEMATICAL SPECIALISTS	90	100	10	11.1
10080000	ENGINEERING,SCIENCE TECHNS	10,500	12,890	2,390	22.8
10100000	MEDICAL WORKERS,EX TECHNS	390	430	40	10.3
10120000	OTHER HEALTH TECHNOLS & TECHNS	50	60	10	20.0
10140000	TECHNICIANS,EX HEALTH OR SCE	1,980	2,210	230	11.6
10160000	COMPUTER SPECIALISTS	2,780	3,850	1,070	38.5
10180000	SOCIAL SCIENTISTS	0	0	0	.0
10200000	TEACHERS	0	0	0	.0
10220000	WRITERS,ARTISTS,ENTERTAINERS	3,830	4,400	570	14.9
10240000	OTH PROFESSIONAL & TECHN WKRS	9,780	11,030	1,250	12.8
20000000	MANAGERS & OFFICIALS	36,970	40,040	4,070	11.3
20060000	OTHER MANAGERS,OFFICIALS,PROPS	35,970	40,040	4,070	11.3
30000000	SALES WORKERS	15,850	15,460	1,610	11.6
40000000	CLERICAL WORKERS	61,660	70,110	8,450	13.3
40020000	STENOS,SECRETARIES,& TYPISTS	11,940	14,130	2,590	22.4
40040000	OFFICE MACHINE OPERATORS	4,210	4,370	160	3.8
40060000	OTHER CLERICAL WORKERS	46,110	51,620	5,510	11.9
50000000	CRAFTS & KINDRED WORKERS	101,300	113,230	11,870	11.7
50020000	CONSTRUCTION CRAFTS WORKERS	8,050	9,100	1,050	13.0
50040000	BLUE COLLAR WORKER SUPVSRS	18,100	20,340	2,240	12.4
50060000	METAL WKG CRAFTS WKRS,EX MECH	21,610	23,870	2,260	10.5
50080000	MECHS,REPAIRERS,INSTALLERS	10,040	11,200	1,160	11.6
50100000	PRINTING TRADE CRAFTS WKRS	11,390	12,310	920	8.1
50120000	TRANS,PUB UTIL CRAFTS WKRS	0	0	0	.0
50140000	OTHER CRAFTS,KINDRED WORKERS	32,100	36,410	4,250	13.2
61000000	OPERATIVES,EX TRANSPORTATION	186,550	207,660	21,110	11.3
61020000	SEMISKILLED METALWORKING OPS	56,300	62,780	6,420	15.5
61040000	SEMISKILLED TEXTILE OPERATIVES	940	920	-20	-2.1
61060000	SEMISKLD PACKING,INSPECTNG OPS	13,940	15,020	1,080	7.7
61080000	OTHER OPERATIVES,EX TRANSPORT	117,310	128,950	11,640	9.9
62000000	TRANSPORT EQUIP OPERATIVES	21,780	24,020	2,240	10.3
63000000	ALL OTHER OPS & SEMISKILLED WKRS	29,540	32,480	2,940	10.0
70000000	SERVICE WORKERS	9,340	10,360	1,020	10.9
70020000	CLEANING SERVICE WORKERS	6,750	7,500	750	11.1
70040000	FOOD SERVICE WORKERS	210	240	30	14.3
70060000	HEALTH SERVICE WORKERS	0	0	0	.0
70080000	PERSONAL SERVICE WORKERS	0	0	0	.0
70100000	PROTECTIVE SERVICE WORKERS	1,430	1,590	160	11.2
70200000	OTHER SERVICE WORKERS	950	1,040	90	9.5
80000000	LABORERS,EX FARM	54,270	56,700	2,430	4.5

U.S. INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 500000 - TRANSPORTATION, COMM. & UTILITIES

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	104,200	110,730	6,530	6.3
10000000	PROFESS,TECHN,& KINDRED WK	8,830	9,940	1,110	12.6
10020000	ENGINEERS	1,280	1,630	350	27.3
10040000	LIFE & PHYSICAL SCIENTISTS	40	40	0	.0
10060000	MATHEMATICAL SPECIALISTS	20	20	0	.0
10080000	ENGINEERING,SCIENCE TECHNS	1,700	1,840	140	8.2
10100000	MEDICAL WORKERS,EX TECHNS	10	10	0	.0
10120000	OTHER HEALTH TECHNCLS & TECHNS	570	600	30	5.3
10140000	TECHNICIANS,EX HEALTH OR SCE	450	490	40	8.9
10160000	COMPUTER SPECIALISTS	450	610	160	35.6
10180000	SOCIAL SCIENTISTS	0	0	0	.0
10200000	TEACHERS	130	140	10	7.7
10220000	WRITERS,ARTISTS,ENTERTAINERS	1,760	1,820	60	3.4
10240000	OTH PROFESSIONAL & TECHN WKRS	2,410	2,750	340	14.1
20000000	MANAGERS & OFFICIALS	8,810	9,370	560	6.4
20040000	ADMINISTRATORS,PUB INSPECTORS	600	660	60	10.0
20060000	OTHER MANAGERS,OFFICIALS,PROPS	8,210	8,710	500	6.1
30000000	SALES WORKERS	1,400	1,590	190	13.6
40000000	CLERICAL WORKERS	30,190	32,150	1,960	6.5
40020000	STENOS,SECRETARIES,& TYPISTS	1,970	2,210	240	12.2
40040000	OFFICE MACHINE OPERATORS	1,030	1,000	-30	-2.9
40060000	OTHER CLERICAL WORKERS	27,160	28,930	1,770	6.4
50000000	CRAFTS & KINDRED WORKERS	18,980	19,720	740	3.9
50020000	CONTRUCTION CRAFTS WORKERS	1,440	1,530	90	6.3
50040000	BLUE COLLAR WORKER SUPVSRS	1,790	1,810	20	1.1
50060000	METAL WKG CRAFTS WKRS,EX MECH	310	330	20	6.5
50080000	MECHS,REPAIRERS,INSTALLERS	4,480	4,770	290	6.5
50100000	PRINTING TRADE CRAFTS WKRS	0	0	0	.0
50120000	TRANS,PUB UTIL CRAFTS WKRS	8,160	8,500	340	3.9
50140000	OTHER CRAFTS,KINDRED WORKERS	2,770	2,770	0	.0
60000000	OPERATIVES,EX TRANSPORTATION	860	900	40	4.7
61020000	SEMISKILLED METALWORKING OPS	250	260	10	4.0
61060000	OTHER OPERATIVES,EX TRANSPORT	620	640	20	3.2
62000000	TRANSPORT EQUIP OPERATIVES	25,530	27,110	1,580	6.2
63000000	ALL OTHER OPS & SEMISKILLED WKRS	530	530	0	.0
70000000	SERVICE WORKERS	1,570	1,630	60	3.8
70020000	CLEANING SERVICE WORKERS	1,040	1,070	30	2.9
70040000	FOOD SERVICE WORKERS	170	170	0	.0
70060000	HEALTH SERVICE WORKERS	0	0	0	.0
70080000	PERSONAL SERVICE WORKERS	140	150	10	7.1
70100000	PROTECTIVE SERVICE WORKERS	110	120	10	9.1
70200000	OTHER SERVICE WORKERS	100	110	10	10.0
80000000	LABORERS,EX FARM	7,500	7,790	290	3.9

OLS INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 600000 - WHOLESALE & RETAIL TRADE, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	436,780	534,400	97,620	22.3
10000000	PROFESS,TECHN,& KINDRED OC	15,800	20,040	4,240	26.8
10020000	ENGINEERS	590	730	140	23.7
10040000	LIFE & PHYSICAL SCIENTISTS	20	30	10	50.0
10080000	ENGINEERING,SCIENCE TECHNS	1,340	1,750	410	30.6
10100000	MEDICAL WORKERS,EX TECHNS	1,750	2,290	540	30.9
10120000	OTHER HEALTH TECHNOLS & TECHNS	60	80	20	33.3
10140000	TECHNICIANS,EX HEALTH OR SCI	310	390	80	25.8
10160000	COMPUTER SPECIALISTS	880	1,350	470	53.4
10220000	WRITERS,ARTISTS,ENTERTAINERS	2,420	2,980	560	23.1
10240000	OTH PROFESSIONAL & TECHN WKRS	8,420	10,440	2,020	24.0
20000000	MANAGERS & OFFICIALS	37,180	46,040	8,860	23.8
20020000	SALES MANAGERS	5,150	6,330	1,180	22.9
20060000	OTHER MANAGERS,OFFICIALS,PROPS	32,030	39,710	7,680	24.0
30000000	SALES WORKERS	89,990	110,600	20,610	22.9
40000000	CLERICAL WORKERS	78,460	98,670	20,210	25.8
40020000	STENOS,SECRETARIES,& TYPISTS	4,460	5,930	1,470	33.0
40040000	OFFICE MACHINE OPERATORS	3,120	3,470	350	11.2
40060000	OTHER CLERICAL WORKERS	70,880	89,270	18,390	25.9
50000000	CRAFTS & KINDRED WORKERS	30,730	37,940	7,210	23.5
50020000	CONTRUCTION CRAFTS WORKERS	1,340	1,640	300	22.4
50040000	BLUE COLLAR WORKER SUPVSRS	2,070	2,570	500	24.2
50060000	METAL WKG CRAFTS WKRS,EX MECH	160	200	40	25.0
50080000	MECHS,REPAIRERS,INSTALLERS	20,090	24,880	4,790	23.8
50140000	OTHER CRAFTS,KINDRED WORKERS	7,060	8,640	1,580	22.4
60000000	OPERATIVES,EX TRANSPORTATION	17,950	20,050	2,100	11.7
61020000	SEMISKILLED METALWORKING OPS	360	460	80	21.1
61060000	SEMISKLD PACKNG,INSPECTNG OPS	7,250	7,950	700	9.7
61080000	OTHER OPERATIVES,EX TRANSPORT	10,330	11,640	1,310	12.7
62000000	TRANSPORT EQUIP OPERATIVES	20,070	24,540	4,470	22.3
63000000	ALL OTHER OPS & SEMISKILLED WKRS	3,110	3,510	400	12.9
70000000	SERVICE WORKERS	115,290	139,290	24,000	20.8
70020000	CLEANING SERVICE WORKERS	7,130	8,800	1,670	23.4
70040000	FOOD SERVICE WORKERS	105,350	126,920	21,570	20.5
70080000	PERSONAL SERVICE WORKERS	430	530	100	23.3
70100000	PROTECTIVE SERVICE WORKERS	650	890	240	36.9
70200000	OTHER SERVICE WORKERS	1,730	2,140	410	23.7
80000000	LABORERS,EX FARM	28,180	33,720	5,540	19.7

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 700000 - FINANCE, INSUR, & REAL ESTATE, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	93,380	105,900	12,520	13.4
10000000	PROFESS,TECHN& KINDRED OC	9,530	11,510	1,980	20.8
10020000	ENGINEERS	140	150	10	7.1
10060000	MATHEMATICAL SPECIALISTS	130	170	40	30.8
10080000	ENGINEERING,SCIENCE TECHNS	40	50	10	25.0
10100000	MEDICAL WORKERS,EX TECHNS	40	40	0	.0
10120000	OTHER HEALTH TECHNCLS & TECHNS	0	0	0	.0
10140000	TECHNICIANS,EX HEALTH OR S&E	120	130	10	8.3
10160000	COMPUTER SPECIALISTS	1,470	2,000	530	36.1
10180000	SOCIAL SCIENTISTS	240	270	30	12.5
10220000	WRITERS,ARTISTS,ENTERTAINERS	180	200	20	11.1
10240000	OTH PROFESSIONAL & TECHN WKRS	7,180	8,480	1,300	18.1
20000000	MANAGERS & OFFICIALS	16,680	18,650	1,970	11.8
20060000	OTHER MANAGERS,OFFICIALS,PROPS	16,680	18,650	1,970	11.8
30000000	SALES WORKERS	6,710	7,590	880	13.1
40000000	CLERICAL WORKERS	51,800	58,270	6,470	12.5
40020000	STENOS,SECRETARIES,& TYPISTS	7,430	8,900	1,470	19.8
40040000	OFFICE MACHINE OPERATORS	3,870	4,400	530	13.7
40060000	OTHER CLERICAL WORKERS	40,500	44,960	4,460	11.0
50000000	CRAFTS & KINDRED WORKERS	1,470	1,660	190	12.9
50020000	CONSTRUCTION CRAFTS WORKERS	310	340	30	9.7
50040000	BLUE COLLAR WORKER SUPVSRS	120	130	10	8.3
50080000	MECHS,REPAIRERS,INSTALLERS	50	50	0	.0
50100000	PRINTING TRADE CRAFTS WKRS	100	120	20	20.0
50140000	OTHER CRAFTS,KINDRED WORKERS	890	1,020	130	14.6
61000000	OPERATIVES,EX TRANSPORTATION	20	20	0	.0
61080000	OTHER OPERATIVES,EX TRANSPORT	20	20	0	.0
62000000	TRANSPORT EQUIP OPERATIVES	40	50	10	25.0
63000000	ALL OTHER OPS & SEMISKILLED WKRS	50	50	0	.0
70000000	SERVICE WORKERS	5,850	6,700	850	14.5
70020000	CLEANING SERVICE WORKERS	4,340	4,830	490	11.3
70040000	FOOD SERVICE WORKERS	290	320	30	10.3
70080000	PERSONAL SERVICE WORKERS	60	70	10	16.7
70100000	PROTECTIVE SERVICE WORKERS	740	1,030	290	39.2
70200000	OTHER SERVICE WORKERS	420	450	30	7.1
80000000	LABORERS,EX FARM	1,230	1,410	180	14.6

OLS INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 800000 - SERVICES, TOTAL

SURVEY MATRIX OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	525,510	665,220	139,710	26.6
10000000	PROFESS,TECHN,& KINDRED OC	202,560	248,440	45,880	22.7
10020000	ENGINEERS	2,180	3,150	970	44.5
10040000	LIFE & PHYSICAL SCIENTISTS	1,060	1,270	210	19.8
10060000	MATHEMATICAL SPECIALISTS	160	200	40	25.0
10080000	ENGINEERING,SCIENCE TECHNS	4,170	5,610	1,440	34.5
10100000	MEDICAL WORKERS,EX TECHNS	33,070	48,300	14,630	43.5
10120000	OTHER HEALTH TECHNOLS & TECHNS	27,420	37,620	10,200	37.2
10140000	TECHNICIANS,EX HEALTH OR SCI	1,690	2,110	420	24.9
10160000	COMPUTER SPECIALISTS	2,230	3,810	1,580	70.9
10180000	SOCIAL SCIENTISTS	1,590	1,860	270	17.0
10200000	TEACHERS	87,840	90,980	3,140	3.6
10220000	WRITERS,ARTISTS,ENTERTAINERS	5,070	6,900	1,830	36.1
10240000	OTH PROFESSIONAL & TECHN WKRS	35,500	46,620	11,120	31.3
20000000	MANAGERS & OFFICIALS	42,430	53,680	11,250	26.5
20060000	OTHER MANAGERS,OFFICIALS,PROPS	42,430	53,680	11,250	26.5
30000000	SALES WORKERS	4,740	6,480	1,740	36.7
40000000	CLERICAL WORKERS	101,080	127,500	26,420	26.1
40020000	STENOS,SECRETARIES,& TYPISTS	31,450	39,460	8,010	25.5
40040000	OFFICE MACHINE OPERATORS	5,850	7,930	2,080	35.6
40060000	OTHER CLERICAL WORKERS	63,790	80,110	16,320	25.6
50000000	CRAFTS & KINDRED WORKERS	15,580	20,630	5,050	32.4
50020000	CONTRUCTION CRAFTS WORKERS	2,220	2,600	380	17.1
50040000	BLUE COLLAR WORKER SUPVSRS	810	1,080	270	33.3
50060000	METAL WKG CRAFTS WKRS,EX MECH	330	420	90	27.3
50080000	MECHS,REPAIRERS,INSTALLERS	5,080	7,040	1,960	38.5
50100000	PRINTING TRADE CRAFTS WKRS	590	720	130	22.0
50140000	OTHER CRAFTS,KINDRED WORKERS	5,940	8,170	2,230	37.5
61000000	OPERATIVES,EX TRANSPORTATION	8,060	12,130	3,470	43.1
61020000	SEMISKILLED METALWORKING OPS	440	590	150	34.1
61060000	SEMISKLD PACKNG,INSPECTNG OPS	160	230	70	43.8
61080000	OTHER OPERATIVES,EX TRANSPORT	8,050	11,310	3,260	40.5
62000000	TRANSPORT EQUIP OPERATIVES	5,670	7,160	1,490	26.3
63000000	ALL OTHER OPS & SEMISKILLED WKRS	2,820	3,390	570	20.2
70000000	SERVICE WORKERS	131,060	171,770	40,710	31.1
70020000	CLEANING SERVICE WORKERS	31,690	39,930	8,240	26.0
70040000	FOOD SERVICE WORKERS	39,030	49,620	10,590	27.1
70060000	HEALTH SERVICE WORKERS	29,620	41,380	11,760	39.4
70080000	PERSONAL SERVICE WORKERS	17,500	23,720	6,220	35.5
70100000	PROTECTIVE SERVICE WORKERS	5,490	7,850	2,360	43.0
70120000	PRIVATE HOUSEHOLD WORKERS	930	1,310	380	40.9
70200000	OTHER SERVICE WORKERS	6,600	7,760	1,160	17.6
80000000	LABORERS,EX FARM	10,910	14,040	3,130	28.7

OES INDUSTRY EMPLOYMENT

DISTRIBUTION BY OCCUPATION--1980 AND PROJECTED 1990

AREA : - WISCONSIN
INDUSTRY: 900000 - GOVERNMENT, TOTAL

SURVEY MATRIX . OCCUPATION CODE	OCCUPATION TITLE	BASE YEAR 1980 EMPLOYMENT	PROJ YEAR 1990 EMPLOYMENT	CHANGE IN EMPLOYMENT	PERCENT CHANGE
00000000	TOTAL, ALL OCCUPATIONS	142,240	157,870	15,630	11.0
10000000	PROFESS,TECHNS& KINDRED OC	32,050	36,390	4,340	13.5
10020000	ENGINEERS	1,980	2,310	330	16.7
10040000	LIFE & PHYSICAL SCIENTISTS	990	1,100	110	11.1
10060000	MATHEMATICAL SPECIALISTS	130	140	10	7.7
10080000	ENGINEERING,SCIENCE TECHNS	2,800	3,250	450	16.1
10100000	MEDICAL WORKERS,EX TECHNS	4,730	5,270	540	11.4
10120000	OTHER HEALTH TECHNCLS & TECHNS	2,120	2,350	230	10.8
10140000	TECHNICIANS,EX HEALTH OR S&E	1,410	1,560	150	10.6
10160000	COMPUTER SPECIALISTS	750	1,180	430	57.3
10180000	SOCIAL SCIENTISTS	1,170	1,500	330	28.2
10200000	TEACHERS	200	220	20	10.0
10220000	WRITERS,ARTISTS,ENTERTAINERS	270	300	30	11.1
10240000	OTH PROFESSIONAL & TECHN WKRS	15,510	17,200	1,690	10.9
20000000	MANAGERS & OFFICIALS	19,770	22,140	2,370	12.0
20040000	ADMINISTRATORS,PUB INSPECTORS	11,330	12,720	1,390	12.3
20060000	OTHER MANAGERS,OFFICIALS,PROPS	8,440	9,420	980	11.6
30000000	SALES WORKERS	60	60	0	.0
40000000	CLERICAL WORKERS	24,150	26,170	2,020	8.4
40020000	STENOS,SECRETARIES,& TYPISTS	8,850	9,490	640	7.2
40040000	OFFICE MACHINE OPERATORS	950	1,090	140	14.7
40060000	OTHER CLERICAL WORKERS	14,350	15,590	1,240	8.6
50000000	CRAFTS & KINDRED WORKERS	9,600	10,540	940	9.8
50020000	CONTRUCTION CRAFTS WORKERS	2,780	3,090	310	11.2
50040000	BLUE COLLAR WORKER SUPVSRS	740	820	80	10.8
50060000	METAL WKG CRAFTS WKRS,EX MECH	340	370	30	8.8
50080000	MECHS,REPAIRERS,INSTALLERS	2,310	2,570	260	11.3
50100000	PRINTING TRADE CRAFTS WKRS	130	130	0	.0
50120000	TRANS,PUB UTIL CRAFTS WKRS	240	270	30	12.5
50140000	OTHER CRAFTS,KINDRED WORKERS	3,070	3,290	220	7.2
60000000	OPERATIVES,EX TRANSPORTATION	600	660	60	10.0
61020000	SEMISKILLED METALWORKING OPS	160	180	20	12.5
61040000	SEMISKILLED TEXTILE OPERATIVES	0	0	0	.0
61060000	SEMISKLD PACKNG,INSPECTNG OPS	0	0	0	.0
61080000	OTHER OPERATIVES,EX TRANSPORT	440	480	40	9.1
62000000	TRANSPORT EQUIP OPERATIVES	2,620	2,920	300	11.5
63000000	ALL OTHER OPS & SEMISKILLED WKRS	500	530	30	6.0
70000000	SERVICE WORKERS	40,060	44,700	4,640	11.6
70020000	CLEANING SERVICE WORKERS	2,890	2,920	30	1.0
70040000	FOOD SERVICE WORKERS	2,250	2,490	240	10.7
70060000	HEALTH SERVICE WORKERS	7,290	8,050	760	10.4
70080000	PERSONAL SERVICE WORKERS	1,820	2,020	200	11.0
70100000	PROTECTIVE SERVICE WORKERS	21,750	24,700	2,950	13.6
70200000	OTHER SERVICE WORKERS	4,060	4,520	460	11.3
80000000	LABORERS,EX FARM	12,850	13,760	910	7.1

WISCONSIN DEPARTMENT OF INDUSTRY,
LABOR AND HUMAN RELATIONS
BUREAU OF LABOR STATISTICS, U.S.D.L.

RELEASE ET 290
June 17, 1983

MANUFACTURING EMPLOYMENT BY AREA
ESTIMATED EMPLOYMENT, EARNINGS AND HOURS

AREA	ALL EMPLOYEES (THOUS.) NUMBER			PRODUCTION WORKER AVERAGES: AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS: INCLUDING OVERTIME			AVERAGE HOURLY EARNINGS: EXCLUDING OVERTIME		
	May 1983	April 1983	May 1982	May 1983	April 1983	May 1982	May 1983	Apr. 1983	May 1982	May 1983	April 1983	May 1982	May 1983	April 1983	May 1982
UNITED STATES	18455.0	18295.0	19049.0	350.32	349.05	329.94	39.9	39.8	39.0	8.78	8.77	8.46	--	--	--
WISCONSIN	472.2	466.0	492.6	395.11	391.55	368.94	40.4	40.2	39.4	9.78	9.74	9.36	9.49	9.44	9.10
Appleton-Oshkosh (Calumet-Winnebago-Outagamie)*	42.6	42.0	42.1	392.08	389.48	359.76	41.8	41.7	40.3	9.38	9.34	8.94	9.01	8.96	8.61
Beloit (City)	5.8	5.8	6.7	401.64	405.16	348.79	43.7	44.0	40.7	9.19	9.20	8.58	--	--	--
Eau Claire (Eau Claire-Chippewa)*	8.5	8.2	8.7	380.88	383.68	346.68	41.4	41.3	39.6	9.20	9.29	8.75	8.91	8.98	8.49
Fond du Lac (County)	9.8	9.8	10.3	351.17	341.37	366.07	40.5	40.1	42.0	8.68	8.51	8.73	8.52	8.34	8.49
Green Bay (Brown County)*	20.6	19.8	20.9	438.68	415.71	402.45	41.7	41.2	41.8	10.52	10.09	9.63	10.01	9.60	9.21
Janesville (City)	8.8	8.5	7.9	476.06	562.80	516.63	40.2	45.0	42.3	11.84	12.51	12.22	11.69	12.11	11.92
Janesville-Beloit (Rock County)*	16.8	16.6	16.6	422.71	469.10	409.65	41.2	43.8	40.8	10.26	10.71	10.04	10.03	10.35	9.73
Kenosha (County)*	16.1	15.3	14.2	472.88	472.32	428.30	41.3	41.0	38.9	11.45	11.52	11.02	11.12	11.09	10.55
La Crosse (County)*	9.8	9.5	10.0	354.48	348.10	336.49	40.0	39.2	38.8	8.86	8.88	8.68	8.49	8.53	8.36
Madison (Dane County)*	18.7	18.4	19.1	374.12	377.45	377.26	39.8	39.9	39.5	9.40	9.46	9.55	9.04	9.07	9.17
Manitowoc (County)	11.8	11.6	11.6	329.23	319.77	291.19	38.7	38.8	36.9	8.50	8.24	7.90	8.33	8.06	7.84
Milwaukee (Milwaukee-Ozaukee-Waukesha-Washington)*	160.0	158.9	173.9	438.34	432.80	407.17	40.4	40.0	39.4	10.85	10.82	10.34	10.51	10.50	10.06
Racine (County)*	22.2	21.6	23.7	400.23	402.80	392.96	39.2	40.0	39.1	10.21	10.07	10.05	10.13	9.75	9.87
Sheboygan (County)*	17.6	17.6	17.5	357.59	357.59	327.08	38.7	38.7	37.0	9.24	9.24	8.84	9.06	9.03	--
Wausau (Marathon County)*	10.8	10.5	10.9	371.36	361.96	345.06	41.4	40.9	40.5	8.97	8.85	8.52	8.63	8.47	--

* STANDARD METROPOLITAN STATISTICAL AREA

WISCONSIN MANUFACTURING EMPLOYMENT BY INDUSTRY
ESTIMATED EMPLOYMENT, EARNINGS AND HOURS

INDUSTRY	ALL EMPLOYEES (THOUS.) NUMBER			PRODUCTION WORKER AVERAGES: AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS: INCLUDING OVERTIME			AVERAGE HOURLY EARNINGS: EXCLUDING OVERTIME		
	May 1983	April 1983	May 1982	May 1983	April 1983	May 1982	May 1983	Apr. 1983	May 1982	May 1983	April 1983	May 1982	May 1983	April 1983	May 1982
MANUFACTURING (INC. CANNING)	472.2	466.0	492.6	395.11	391.55	368.94	40.4	40.2	39.4	9.78	9.74	9.36	9.49	9.44	9.10
MANUFACTURING (EXC. CANNING)	464.3	458.5	484.9	397.13	394.13	370.50	40.4	40.3	39.4	9.83	9.78	9.40	9.53	9.48	9.14
DURABLE GOODS	290.3	286.6	310.1	399.78	398.97	371.77	40.3	40.3	39.0	9.92	9.90	9.53	9.70	9.65	9.34
Lumber & Wood Products (Exc. Furniture)	20.2	19.8	18.5	294.67	293.04	256.71	40.7	40.7	37.7	7.24	7.20	6.81	7.10	7.05	6.69
Furniture & Fixtures	8.4	8.5	8.5	293.45	289.05	256.04	41.1	41.0	38.3	7.14	7.05	6.69	--	7.02	6.68
Stone, Clay & Glass Products	7.1	6.7	7.6	366.27	358.75	352.52	41.2	41.0	41.0	8.89	8.75	8.60	8.71	8.58	8.39
Primary Metal Industries	17.8	17.4	20.1	374.22	371.45	340.03	39.6	39.1	36.9	9.45	9.50	9.21	9.21	9.26	9.09
Fabricated Metal Products	47.0	46.4	50.3	395.52	392.35	358.59	40.4	40.2	38.4	9.79	9.76	9.33	9.46	9.39	9.05
Machinery (Exc. Electrical)	93.5	92.5	105.9	441.29	436.00	417.98	39.9	39.6	39.5	11.06	11.01	10.58	10.90	10.86	10.40
Electric & Electronic Equipment	46.6	47.0	49.8	368.68	362.87	345.60	39.6	39.4	38.5	9.31	9.21	8.97	9.15	9.07	8.90
Transportation Equipment	30.1	28.6	28.2	532.97	561.08	507.26	42.4	43.8	42.0	12.57	12.81	11.09	12.08	12.20	11.66
Instruments & Related Products	9.9	9.9	10.9	319.06	317.22	287.76	37.1	37.9	37.8	8.60	8.37	7.61	--	--	7.54
Miscellaneous Manufacturing	9.7	9.8	10.4	--	--	--	--	--	--	--	--	--	--	--	--
NONDURABLE GOODS	181.9	179.5	182.5	387.18	381.50	364.11	40.5	40.2	40.1	9.56	9.49	9.08	9.14	9.08	8.69
Food & Kindred Products	59.1	57.5	59.6	383.10	379.27	374.42	39.7	39.1	39.8	9.65	9.70	9.41	9.18	9.25	8.91
Textile Mill Products	4.4	4.3	4.2	272.34	263.53	262.95	39.7	39.1	39.6	6.86	6.74	6.64	6.66	6.58	6.36
Apparel & Other Textile Products	5.9	5.8	5.8	217.29	213.57	200.83	37.4	37.8	36.6	5.81	5.65	5.49	5.66	5.53	--
Paper & Allied Products	46.4	45.8	46.4	465.70	450.11	415.35	44.1	43.7	43.1	10.56	10.30	9.63	10.08	9.82	9.21
Printing, Publishing & Allied Ind	31.7	31.8	31.6	410.58	409.96	398.52	38.3	38.1	38.4	10.72	10.76	10.38	--	--	--
Chemicals & Allied Products	9.5	9.5	9.6	429.09	434.89	391.54	41.7	42.1	39.6	10.29	10.33	9.90	10.06	10.06	9.80
Rubber & Misc. Plastics Products	16.4	16.3	16.4	308.10	312.84	290.17	39.0	39.5	38.3	7.90	7.92	7.57	7.73	7.72	7.42
Leather & Leather Products	8.1	8.2	8.6	260.94	259.49	245.34	38.6	38.5	38.2	6.76	6.74	6.42	6.64	6.68	6.34
Other Nondurable Goods	8.3	8.3	8.3	--	--	--	--	--	--	--	--	--	--	--	--

DATA INCLUDES ALL FULL-TIME AND PART-TIME EMPLOYES WHO WORKED DURING, OR RECEIVED PAY FOR, ANY PART OF THE PAY PERIOD WHICH INCLUDES THE 12th OF THE MONTH. PROPRIETORS, SELF-EMPLOYED PERSONS, DOMESTIC SERVANTS AND PERSONNEL OF THE ARMED FORCES ARE EXCLUDED.

ALL ESTIMATES ARE ADJUSTED TO EMPLOYMENT LEVELS OF FIRST QUARTER 1981.

ALL CURRENT MONTH DATA ARE PRELIMINARY.

NONAGRICULTURAL EMPLOYMENT IN WISCONSIN AND SPECIFIED AREAS
TOTAL ESTIMATED EMPLOYEES IN NONAGRICULTURAL ESTABLISHMENTS SHOWN BY INDUSTRY DIVISION
(In Thousands)

Year & Month	Total	Manufac-turing	Mining	Const.	Trans.& Pub.Ut.	Trade	Finance	Service & Misc.	Govern-ment
WISCONSIN									
June 1982	1882.4	494.1	2.0	55.1	88.1	435.0	98.3	387.8	322.1
May 1983	1849.7	472.3	2.2	47.4	85.2	429.3	97.8	388.0	327.4
June 1983	1874.9	482.5	2.5	51.1	84.5	433.8	99.2	391.5	329.9
APPLETON-OSHKOSH METROPOLITAN AREA (CALUMET-WINNEBAGO-OUTAGAMIE COUNTIES)									
June 1982	121.7	43.3	-	4.5	4.3	25.4	5.8	22.2	16.3
May 1983	120.5	42.6	-	3.8	4.3	25.1	5.8	22.3	16.6
June 1983	122.0	43.6	-	4.1	4.2	25.2	5.9	22.7	16.4
EAU CLAIRE METROPOLITAN AREA (EAU CLAIRE AND CHIPPEWA COUNTIES)									
June 1982	47.3	9.0	-	1.1	2.7	12.6	1.7	10.0	10.3
May 1983	48.3	8.7	-	1.1	2.6	13.3	1.7	9.8	11.1
June 1983	47.5	9.1	-	1.2	2.6	13.0	1.7	10.0	10.0
GREEN BAY METROPOLITAN AREA (BROWN COUNTY)									
June 1982	78.4	21.1	-	3.1	6.2	19.6	2.6	15.3	10.5
May 1983	77.6	20.7	-	2.4	6.2	20.0	2.6	16.0	9.9
June 1983	79.0	21.0	-	2.6	6.3	20.3	2.6	15.9	10.2
JANESVILLE-BELOIT METROPOLITAN AREA (ROCK COUNTY)									
June 1982	50.1	17.8	-	1.1	2.5	11.0	1.4	9.1	7.1
May 1983	48.7	16.4	-	0.8	2.7	10.9	1.4	9.2	7.2
June 1983	50.3	18.4	-	0.9	2.7	10.9	1.4	9.3	6.8
KENOSHA METROPOLITAN AREA (KENOSHA COUNTY)									
June 1982	37.8	12.1	-	1.6	1.3	8.2	1.0	7.5	6.2
May 1983	41.8	17.4	-	1.3	1.2	7.6	1.0	7.4	6.0
June 1983	42.1	17.9	-	1.2	1.2	7.7	1.0	7.3	5.8
LA CROSSE METROPOLITAN AREA (LA CROSSE COUNTY)									
June 1982	45.0	10.2	-	1.2	1.9	11.8	1.1	11.7	6.9
May 1983	46.5	9.7	-	0.9	1.8	12.2	1.2	12.6	8.1
June 1983	45.7	9.7	-	1.0	1.8	12.3	1.2	12.5	7.1
MADISON METROPOLITAN AREA (DANE COUNTY)									
June 1982	168.7	19.8	-	5.5	6.3	36.6	14.0	33.4	53.0
May 1983	169.7	18.6	-	4.3	6.3	37.2	13.6	34.6	55.3
June 1983	169.4	18.9	-	4.5	6.2	36.9	13.8	34.5	54.6
MILWAUKEE METROPOLITAN AREA (MILWAUKEE-OZAUKEE-WAUKESHA-WASHINGTON COUNTIES)									
June 1982	638.0	172.4	-	15.5	33.1	139.8	41.4	148.9	86.9
May 1983	613.2	159.6	-	13.0	31.6	137.4	40.7	148.8	82.1
June 1983	618.1	160.5	-	13.4	31.4	138.3	41.1	150.2	83.2
RACINE METROPOLITAN AREA (RACINE COUNTY)									
June 1982	62.6	23.6	-	1.5	2.3	13.0	2.3	11.1	8.8
May 1983	59.9	22.2	-	1.2	2.4	12.5	2.2	11.1	8.3
June 1983	60.7	22.6	-	1.2	2.4	12.7	2.3	11.1	8.5
SHEBOYGAN METROPOLITAN AREA (SHEBOYGAN COUNTY)									
June 1982	43.1	17.7	-	1.2	1.4	8.3	1.8	6.4	6.2
May 1983	42.0	17.6	-	1.2	1.3	8.1	1.7	6.4	5.6
June 1983	42.6	18.0	-	1.2	1.3	8.1	1.8	6.5	5.7
WAUSAU METROPOLITAN AREA (MARATHON COUNTY)									
June 1982	39.1	10.8	-	0.8	2.2	9.1	3.8	6.2	5.7
May 1983	39.6	10.9	-	0.8	2.2	9.2	3.8	6.8	6.0
June 1983	40.0	11.4	-	1.0	2.1	9.2	3.8	6.8	5.8

Employment levels revised and adjusted to first quarter 1981
(-) Included in Service and Miscellaneous. NOTE: CURRENT MONTH DATA ARE PRELIMINARY.

The data presented in these tables result from your participation in the BLS 790 survey.

The information which you send to us each month is used also by the Bureau of Labor Statistics in estimating employment, hours, and earnings for the Nation.

The following discussion of uses of these estimates is excerpted from the BLS Handbook of Methods, Bulletin 1910, 1976.

> "These series are used by labor unions, business firms, universities, trade associations, private research organizations, and many government agencies. Research workers in labor unions and industry, as well as others responsible for analyzing business conditions, use the trends reflected in these particular statistics as economic indicators. The average weekly hours series are utilized as lead indicators of swings in the business cycle. Labor economists and other social scientists find these series to be an important indicator of the Nation's economic activity, as well as a measure of the well-being of the millions of Americans who depend on salaries and wages. Industrial growth and progress may be assessed by using the employment and hours series in conjunction with other economic data to yield measures of productivity.
>
> Analysts study employment trends to detect changes in industrial structure, and to observe growth and decline proclivities of individual industries. They also are used in the Bureau's Occupational Outlook program as a basis for projection of future trends.
>
> Executives use the employment, earnings, and hours data for guidance in plant location, sales, and purchases. Also, firms negotiating long-term supply or construction contracts often utilize series on average hourly earnings as an aid in reaching an equitable agreement; "escalation clauses" may be included in the contracts, which permit an increase or a lowering of the settlement price depending on the movement of average hourly earnings in a selected industry. Wide need has been demonstrated by both labor and business for industry series on hourly earnings and weekly hours, to provide a basis for labor-management negotiations. They not only furnish current and historical information on a given industry but provide comparative data on related industries."

Comments and questions regarding the BLS 790 survey are welcome and may be addressed to:

Cooperating Representative, BLS
Department of Industry, Labor and Human Relations
P.O. Box 7944
Madison, Wisconsin 53707

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

PERSONS BELOW POVERTY LEVEL AS A PERCENT OF ALL PERSONS

	4TH COUNT 1970 CENSUS				1980 PERCENTS, ESTIMATED FROM REGIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	420,581	380,128	33,575	6,878	12.05	10.22	40.30	23.76
PERSONS IN FAMILIES	290,982	255,602	29,802	5,578	8.93	7.28	36.49	12.06
UNRELATED PERSONS	129,599	124,526	3,773	1,300	3.12	2.95	3.81	1.69

	1970 REGION 9 CPS ESTIMATES				1981 REGION 9 CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	1,483,998	1,175,258	295,033	13,703	1,968,203	1,383,145	541,742	43,313
PERSONS IN FAMILIES	1,144,505	877,813	256,428	10,263	1,597,063	1,079,143	481,885	36,034
UNRELATED PERSONS	339,493	297,445	38,605	3,440	371,140	304,002	59,857	7,279

	4TH COUNT 1970 CENSUS				1981 PERCENTS, ESTIMATED FROM NATIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	420,581	380,128	33,575	6,878	10.49	9.79	27.99	23.68
PERSONS IN FAMILIES	290,982	255,602	29,802	5,578	7.11	6.55	23.84	20.21
UNRELATED PERSONS	129,599	124,526	3,773	1,300	3.38	3.24	4.15	3.47

	1970 NATIONAL CPS ESTIMATES				1981 NATIONAL CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	28,870,450	20,350,917	8,044,223	475,307	35,543,963	24,501,937	9,893,659	1,148,364
PERSONS IN FAMILIES	24,064,159	16,434,180	7,237,063	392,914	29,299,539	19,725,636	8,579,021	994,881
UNRELATED PERSONS	4,806,291	3,916,737	807,160	82,393	6,244,424	4,776,301	1,314,638	153,483

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

RELATED CHILDREN UNDER 18 BELOW POVERTY LEVEL AS PERCENT OF ALL PERSONS

	4TH COUNT 1970 CENSUS				1980 PERCENTS, ESTIMATED FROM REGIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	140,218	117,078	19,588	3,552	5.06	4.16	23.12	8.21
BY AGE								
UNDER 6 YEARS OLD	44,319	35,875	7,228	1,216	1.95	1.63	10.03	1.07
6-17 YEARS OLD	95,899	81,203	12,360	2,336	3.11	2.54	13.10	*
BY TYPE OF FAMILY AND AGE								
MALE HEAD								
UNDER 6 YEARS OLD	27,441	24,127	2,559	755	.98	.89	2.00	*
6-17 YEARS OLD	56,998	51,924	3,650	1,424	1.50	1.58	.83	*
FEMALE HEAD								
UNDER 6 YEARS OLD	16,878	11,748	4,669	461	.97	.74	8.03	.10
6-17 YEARS OLD	38,901	29,279	8,710	912	1.61	.95	12.27	*

	1970 REGION 9 CPS ESTIMATES				1981 REGION 9 CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	413,094	265,416	142,637	5,039	693,541	414,811	261,821	16,905
BY AGE								
UNDER 6 YEARS OLD	138,723	79,785	53,898	5,039	281,930	159,542	115,952	6,434
6-17 YEARS OLD	274,371	185,631	88,739	0	411,611	255,269	145,869	10,471
BY TYPE OF FAMILY AND AGE								
MALE HEAD								
UNDER 6 YEARS OLD	55,631	42,311	13,320	0	83,111	63,280	15,042	4,789
6-17 YEARS OLD	132,027	97,111	34,916	0	152,946	129,340	13,833	9,772
FEMALE HEAD								
UNDER 6 YEARS OLD	83,092	37,474	40,578	5,039	198,819	96,262	100,910	1,646
6-17 YEARS OLD	142,344	88,520	53,823	0	258,665	125,929	132,036	699

	4TH COUNT 1970 CENSUS				1981 PERCENTS, ESTIMATED FROM NATIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	140,218	117,078	19,588	3,552	3.37	3.11	13.87	12.46
BY AGE								
UNDER 6 YEARS OLD	44,319	35,875	7,228	1,216	1.17	1.10	5.19	4.52
6-17 YEARS OLD	95,899	81,203	12,360	2,336	2.20	2.01	8.68	7.93
BY TYPE OF FAMILY AND AGE								
MALE HEAD								
UNDER 6 YEARS OLD	27,441	24,127	2,559	755	.61	.66	.93	2.81
6-17 YEARS OLD	56,998	51,924	3,650	1,424	1.10	1.14	1.41	4.53
FEMALE HEAD								
UNDER 6 YEARS OLD	16,878	11,748	4,669	461	.55	.43	4.26	1.72
6-17 YEARS OLD	38,901	29,279	8,710	912	1.10	.87	7.27	3.40

	1970 NATIONAL CPS ESTIMATES				1981 NATIONAL CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	9,551,084	5,650,458	3,738,599	162,023	11,365,825	7,023,948	3,942,733	399,139
BY AGE								
UNDER 6 YEARS OLD	3,159,065	1,808,040	1,294,735	56,288	4,110,038	2,578,250	1,384,766	147,018
6-17 YEARS OLD	6,392,019	3,842,418	2,443,864	105,735	7,255,787	4,445,698	2,557,967	252,121
BY TYPE OF FAMILY AND AGE								
MALE HEAD								
UNDER 6 YEARS OLD	1,808,432	1,189,970	578,159	40,302	1,956,792	1,515,822	335,813	105,155
6-17 YEARS OLD	3,523,705	2,436,572	1,008,932	78,250	3,309,759	2,502,395	628,736	178,627
FEMALE HEAD								
UNDER 6 YEARS OLD	1,350,633	618,070	716,576	15,986	2,153,246	1,062,428	1,048,953	41,863
6-17 YEARS OLD	2,868,314	1,405,896	1,434,932	27,485	3,946,028	1,943,303	1,929,231	73,494

DEPARTMENT OF LABOR
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POPULATION 65 YEARS OLD AND OVER BY POVERTY STATUS
COUNT OF PERSONS 65 YEARS OLD AND OVER

	4TH COUNT 1970 CENSUS				1980 PERCENTS, ESTIMATED FROM REGIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS								
ABOVE POVERTY LEVEL	332,926	329,598	2,476	852	88.62	88.78	82.41	*
BELOW POVERTY LEVEL	106,977	104,928	1,593	456	11.38	11.22	17.59	*

	1970 REGION 9 CPS ESTIMATES				1981 REGION 9 CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS								
ABOVE POVERTY LEVEL	932,609	902,861	29,748	0	1,267,449	1,208,700	53,460	5,288
BELOW POVERTY LEVEL	277,592	256,129	21,463	0	150,711	136,072	12,800	1,838

	4TH COUNT 1970 CENSUS				1981 PERCENTS, ESTIMATED FROM NATIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS								
ABOVE POVERTY LEVEL	332,926	329,598	2,476	852	85.13	85.93	72.05	81.53
BELOW POVERTY LEVEL	106,977	104,928	1,593	456	14.87	14.07	27.95	18.47

	1970 NATIONAL CPS ESTIMATES				1981 NATIONAL CPS ESTIMATES			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS								
ABOVE POVERTY LEVEL	13,976,374	13,193,778	674,801	107,794	20,814,622	19,283,482	1,271,719	259,420
BELOW POVERTY LEVEL	4,780,778	4,045,990	688,690	46,098	3,871,051	3,041,507	782,581	46,962

APT Glossary of Terms

Annual Average The aggregate of 12 months data divided by 12. Annual average data are commonly used for projections and other long-term analyses.

Average Hourly Earnings Average weekly earnings divided by average weekly hours.

Average Weekly Earnings Average total money earnings of production or nonsupervisory workers in the survey week, including overtime and incentive pay.

Average Weekly Hours Average total hours worked by production and nonsupervisory workers in the survey week, including overtime, paid vacation and sick leave.

Benchmark Most economic time series utilize a sample trend made of the best available data at the time. Periodically the series are adjusted due to more complete information being available. This periodic adjustment is a Benchmark Revision and the point-in-time for which the more complete data was available is the Benchmark Date. Data is commonly referenced by their benchmark data, e.g., "data based on a March, 1976, benchmark."

Civilian Labor Force See Labor Force.

Comprehensive Employment and Training Act of 1973 (CETA) An act which set up a decentralized system of job training, Public Service Employment (PSE) and other employment services. This act provides federal grants to selected prime sponsors and replaced the Manpower Development and Training Act (MDTA).

Consumer Price Index (CPI) Officially titled the Consumer Price Index for Urban Wage Earnings and Clerical Workers, this index measures changes over time in a predetermined marketbasket of goods and services. Most goods and services are covered in the marketbasket as well as sales and excise taxes, but income and property are not included. The CPI is not a true cost of living index nor can it be compared between areas to determine their relative cost of living.

Covered Employment Employment in an industry that falls under the coverage of the respective states' unemployment insurance program. In most states presently only agriculture, the self-employed, some employed students, religious organizations, full commissioned salesmen and elected and appointed officials have significant numbers of noncovered workers.

Current Employment Statistics (CES) Estimates of nonagricultural wage and salary employment and production worker hours and earnings by industry. ES produces these estimates monthly for each state and SMSA from a sample of employing establishments in cooperation with the Bureau of Labor Statistics.

Current Population Survey (CPS) A monthly household survey of the population of the United States. This survey is the data source for the national estimates of labor force composition. Some CPS data is also incorporated into the state and area labor force estimating procedures to improve interstate comparability.

Discouraged Worker Persons who want work but made no attempt to find work in the past 4 weeks because of a belief that they could not find employment. Discouraged workers are not counted among the unemployed.

DOT Codes An occupational coding structure based upon job traits and relationships. The codes are published in the Dictionary of Occupational Titles.

Economically Disadvantaged An individual whose immediate family either receives cash welfare payments or whose annual income falls below the current Poverty Income Guidelines.

Employment by Place of Residence An estimate of the number of persons employed who live within a given labor market or other geographic area. All persons who worked for pay and unpaid family workers who worked at least 15 hours or more in the survey week are included, as are workers who were temporarily absent from their job due to vacations, labor disputes, etc.

Employment by Place of Work An estimate of the number of jobs filled in the survey week within a given area. Multiple job holders are counted for each job. In most states only the nonagricultural wage and salary workers are tallied by place of work. Labor disputants are not included in the estimates of employment by place of work.

Employment Security Automated Reporting System (ESARS) A computerized tally of all Job Service activities, job applicant and job openings characteristics.

Hard-to-Fill Job Openings Job openings which have gone unfilled for a month or more. Some of the openings may be difficult to fill because of the job environment, wage scales or lack of qualified workers.

High Demand Occupation Occupations which have a substantial number of job openings both in absolute terms and relative to the number of job applicants for that occupation. High demand may be the result of either high growth, high turnover and sometimes by a combination of the two.

Index or Index Number A measure of relative growth compared with a base figure for the same time series. In index form the base period is set equal to 100, and data for other periods are expressed as percentages of the base value. Plural is indices.

Insured Unemployment A count of persons who have filed claims for state unemployment insurance benefits.

Insured Unemployment Rate An administrative tool which is the ratio of insured unemployment to covered employment lagged about 6-9 months.

Job Bank A computerized system which provides rapid dissemination of job orders throughout a network of Employment Division local offices.

Job Corps A national system of 60 residential centers in 31 states and Puerto Rico providing basic education, vocational training, counseling, health care, and other services to help disadvantaged young men and women, age 16 through 21, prepare for jobs and responsible citizenship.

Labor Force All persons 16 years and older who are either employed or unemployed. Normally published as a civilian labor force by place of residence (see Employment by Place of Residence).

Labor Market Area An area with a central community and economic concentration in which workers can generally change jobs without changing their residence. In most states labor market areas are either counties or groups of counties.

Labor Market Information (LMI) Data on a broad range of topics such as labor force, employment by industry and occupation, unemployment, population, earnings, wages, hours worked, training programs and labor turnover.

Labor Turnover Movement of workers in and out of employment in a given time period in an industry, occupation or firm. The labor turnover program publishes a time series of monthly industry data on hires, rehires, quits, layoffs, etc. Turnover in an occupation is often considered on a longer time frame.

Medical Experience Directed Into Health Careers (MEDIHC) A program assisting veterans who want to pursue a health career in civilian life. Any veteran seeking a civilian health career or employer seeking qualified personnel in the health field may contact the Veteran's Representative at the nearest state Employment Service Office.

Multiple Job Holders Persons who simultaneously work more than one job.

Nonagricultural Wage and Salary Employment Place of work employment that does not include the self-employed, unpaid family workers, domestics or agricultural workers. Conceptually this is probably the most consistent economic time series available to compare different labor markets over an extended period of time.

Occupational Employment Statistics (OES) A program which produces occupational data for major industries once every three years. Projections by occupation are made which aid educators and other occupational planners.

Part-time Work Work that is less than 35 hours per week

Per Capita Income Total personal income divided by total population.

Personal Income, Total Private and government wage and salary payments in cash and in kind, other labor income, farm and nonfarm proprietors' income, interest, net rents, dividends and transfer payments, less personal contributions for social insurance. It is measured before the deduction of personal income and other personal taxes. Dollars are not adjusted for change in consumer price index.

Seasonal Adjustment Minimizes the changes in any time series from normal annual occurrences, such as Christmas, summer vacations and weather. After seasonal adjustment any month can be compared with the annual average, or any other month and differences should then be due to economic trends or unusual occurences. Seasonally adjusted data more accurately portrays underlying economic trends, but should not be used where the current level is more important to the data user than the economic trend. No meaningful seasonal adjustment exists for annual or annual average data since the purpose is to make monthly or quarterly data comparable to the annual average data.

SIC Codes Standard Industrial Classification code structure in which all establishments are classified by a four-digit code according to their primary economic activity. Frequently references will be made to SIC codes at the 1, 2 or 3 digit levels when a less specific classification is useful.

Standard Metropolitan Statistical Area (SMSA) Except in the New England States, SMSAs consist of counties or groups of contiguous counties which meet specifications of social and economic integration with a central city (or twin cities) of at least 50,000 population. In New England States, SMSAs consist of towns or cities rather than counties.

Survey Week The week that includes the 12th of the month is used as a reference period for most labor force data.

Time Series A set of consistent economic quantitative data collected at periodic intervals (most labor market information is monthly, but weekly and annual data is published for some items).

Underemployment A term that includes both persons who are working part-time who would prefer full-time work, and persons working full-time in an occupation which does not utilize their skills derived from prior training or experience.

Unemployment Persons who were not employed during the monthly survey week but were available for work and had either (1) overtly engaged in a jobseeking activity within the four week period up to and including the survey week; (2) were waiting to be recalled from a layoff; or (3) were waiting to report to a new wage and salary job within 30 days.

Unemployment Rate The number of unemployed persons expressed as a percentage of the labor force. Commonly the seasonally adjusted unemployment rate referred to as the unemployment rate and it is usually the only rate quoted in the monthly news release on the U.S. unemployment situation (see Seasonal Adjustment).

Vietnam Era Veteran (VEV) Any person who served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released with other than a dishonorable discharge; or was discharged or released from active duty for a service-connected disability if any part of such duty was performed between these dates.

Work Incentive Program (WIN) Counseling, training, job development and supportive services are provided to employable recipients of Aid-to-Families-with-Dependent-Children (AFDC). The object is to place AFDC recipients into suitable employment.